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THE
LONDON MEDICAL REVIEW
AND
MAGAZINE;

BY A
SOCIETY OF PHYSICIANS AND SURGEONS.

VOLUME THE SECOND:
INCLUDING SIX MONTHLY NUMBERS,
FROM SEPTEMBER 1799, TO FEBRUARY 1800.

Solus veritatis amor, et communis utilitatis studium, ad has partes
suscipiendas impulerunt. BAGLIVI Oper. in Præf.

London:

PRINTED FOR THE SOCIETY,

BY S. GOSNELL, LITTLE QUEEN STREET, HOLBORN.

Published by Messrs. CADELL and DAVIES, Strand; RICHARDSON,
Royal Exchange; EGERTON, Charing Cross; MURRAY and
HIGHLEY, Fleet Street; and SYMONDS,
Pater-noster Row.

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PREFACE

TO THE

SECOND VOLUME.

THE Second Volume of our Repository being completed, another opportunity is afforded us of expressing our gratitude for the increasing approbation it has received.

We have the satisfaction to state, that, whatever deficiencies may be observable in the foreign department of our Work, a considerable supply of books from the continent is now in our possession : and with regard to domestic publications, we fear not to affirm, that we have given a more copious and faithful account than any other medical journal.

Our thanks are particularly due to those Correspondents who have honoured us with original communications : but, while we solicit a continuance of their favours, it is also requested that cases or observations may be sent us in as concise a form as perspicuity will allow, and that they may always be authenticated with the *names* of their respective authors.

The ardour of philosophical inquiry which is at
A 2 present

present abroad in the world, though in many respects highly beneficial to the healing art, nevertheless exposes it to peculiar disadvantages. In the enthusiasm which new remedies and discoveries produce in the minds of their advocates or inventors, there is some danger of forgetting the established and tried precepts of former times, and over-rating the doctrines of our own day. But, ἡ τέχνη μακρὴ, ἡ κρίσις καλεπὴ; art is long, and judgment difficult. Great time and care are wanting fully to ascertain the efficacy, and appreciate the value, even of useful discoveries. To give them their full effect, they must be incorporated with our present knowledge, but must not supplant it: for, after all, whatever in medicine is not reducible to practice, and is not an improvement in practice, is no improvement at all, —however new, or beautiful, or striking it may appear.

Impressed strongly with these sentiments, we are desirous that our Work should principally be made a repository of the facts and practical discoveries of the present time; and we shall feel most highly obliged by those communications which throw light on the NATURE OR TREATMENT OF DISEASES. This is the grand object for which we labour; and this, we are convinced, must be the ultimate test of every real or fancied improvement.

R. W.

LONDON,

Feb. 28, 1805.

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CORRIGENDA.

Page 199, note, *for euphoria, read, euphorbia:*

252, the price of article IX. should be 12s. and that of article X. 9s.

DIRECTIONS TO THE BINDER.

The Plate of Mr. Rowlands's Retractor and Saw, to face P. 194.

Mr. Baker's Plate of an extraordinary Disease of the Penis, to face P. 473.

THE
LONDON MEDICAL REVIEW
AND
MAGAZINE.

VOL. II. N^o VII.—SEPTEMBER MDCCXCIX.

ACCOUNT OF NEW PUBLICATIONS.

ART. I. *Essay on the Causes, early Signs, and Prevention of Pulmonary Consumption; for the Use of Parents and Preceptors.* By THOMAS BEDDOES, M. D. Octavo. pp. 274. LONGMAN, London. 1799. Price 5s.

WE agree with Dr. Beddoes, that the prevention and cure of pulmonary consumption may be numbered among the things most wanting to our system of life: if, therefore, by promulgating the means he recommends “in the interior of families,” so desirable an end may be attained, we cannot but highly approve the present undertaking; though “all considerations of which the medical practitioner only can avail himself” are entirely passed over.

This popular work is arranged under distinct heads, bearing so little relation to each other, that it is difficult to give a methodical and connected analysis of it. After having proved the fatality and frequency of consumption, our author thus develops his PLAN OF THE ESSAY: “It is my business

to omit nothing calculated to arouse vigilance, or to render the measures to be pursued clearly comprehensible. Nor should I introduce any thing but what, in my own opinion, conduces to one or other of these ends. All disquisitions of mere curiosity, therefore—all considerations of which the medical practitioner only can avail himself, I shall pass over. Hence, I shall not touch upon the dispute concerning the daily double exacerbation of hectic fever, nor shall I examine the opinions of others concerning tubercles, or propose my own ideas at any length.

“ In search of facts, applicable in the sequel to my subject, I shall first engage in a brief inquiry concerning those countries and classes that enjoy more or less of exemption from consumption. Could a doctrine of exemption be established, it might furnish something useful by way of moral. If we could discern the circumstances on which exemption depends, we should only have to adopt them as nearly as possible into our own conduct. On the other hand, if it shall appear that there are whole descriptions of persons more liable to the complaint, we may stand a chance of collecting from their history a lesson equally useful, concerning the habits to be avoided.

“ It would have been doubtless more simple to lay down a system of rules. But in a person who is conscious that he has not a thorough knowledge of causes and effects, this would argue too great presumption. Nor would his authority be effectual to the observance of his precepts, unless he was known to possess, as well as possessed, that necessary qualification. It would not, indeed, be easy to comprehend the variety of situations in a set of rules; but the principles once known, rules for the occasion may be easily deduced. It seems, therefore, in every view, safer not to lay down conclusions without their premises.

“ The precept of Horace—

Nonum prematur in annum—

appears

appears to me pernicious in the extension often given it. The seeds of science will at times fructify more abundantly in many minds than in one. They cannot, therefore, in such cases, be too soon cast abroad. On the present occasion, however, I thought it due to those who may be disposed to follow my suggestions, to take a considerable time for the revision of my materials. In the same spirit of caution, I shall every where adhere to gross, palpable facts, refraining from all attempts to penetrate by conjecture into the hidden workings of the animal machine."

CLIMATE.—The author here throws out some observations, which, he says, may be of use to those who are at a loss to determine upon the propriety of removing abroad:—and from the whole of which it appears, that this disease is almost unknown in the West Indies;—that, from the praises which ancient and modern writers have bestowed upon Egypt for its salubrity, it is little known there;—that the same observation will apply to Bengal;—that the disease is frequent among the natives of Portugal and Italy. At Lisbon it is a common expedient to send patients to the other side of the Tagus.

"From the medical literature of Italy," says Dr. B. "I conclude that we may rank consumption among the common disorders of that country; Italian physicians often make it the subject of their publications; and the numerous cases, which some of these authors have described, read precisely like reports concerning British invalids. The advantages of Madeira as a residence for the consumptive are far from established. In phthisis far advanced, I have known recovery the consequence of a voyage thither. But all the symptoms had disappeared before the patient's arrival. I have it from a medical friend, who resided there some months, that scrophula and consumption are by no means uncommon. Two, as I am credibly informed, among the British settlers, persons who did not go out as invalids, have died of consumption within these twelve months. A resident lady of delicate health has

lately fallen into the disorder. This proportion would be reckoned not inconsiderable even in Britain. So little of preservative power does the island possess! Indeed the wetness of its atmosphere appears to counterbalance the admirable uniformity of its temperature. The incommodiousness of its roads, and other disadvantages, are sufficiently known. Dr. Gordon, under whose care some consumptive patients were placed in Madeira by Sir John Pringle and others (as appears from his letter, published in Dr. Read's *Treatise on Consumption*,) discouraged the practice."

CLASSES EXEMPT.—From this section we learn, upon the testimony of respectable authorities, that butchers, cat-gut makers, soap-boilers, fish-wives, sailors, watermen, keelmen, stable-boys, and grooms, are the least liable to consumption. These facts are enlarged upon and analyzed in a subsequent part.

PERSONS MORE LIABLE TO PHTHISIS.—Such are stonecutters, needle-grinders, casters of fine brass work, who inhale a hard powder; also fifers, and those who play on wind instruments; and all who follow sedentary occupations in confined rooms.

ANIMALS CONSUMPTIVE.—The official situation of Mr. Huzard has enabled him to ascertain, that milking cows, when kept in certain situations, die of consumption. Dr. Scemmering and Mr. Carlisle have observed, that apes, and the elephant, are subject, in these climates, to consumption, and that their lungs were found after death to be ulcerated. This is the substance of what relates to animals: the remainder of this section contains a few straggling suggestions of Mr. Carlisle on consumption, and an account of the degree in which the Dutch and English are comparatively subject to pulmonary affections, from Dr. Cogan, a physician, who practised in London and Rotterdam.

"I think," says Mr. Carlisle, "my experience in the observance of diseases authorizes me to conclude, that few persons afflicted with scrophulous affections of the superficial

ficial lymphatic glands of the large joints or bones (when scrophula attacks these parts early in life,) are liable to consumption of the lungs.—This may be contrary to your experience; but I have been often disappointed with finding the lungs sound when scrophula had ravaged the whole set of superficial lymphatic glands, and all the spongy bones which are remote from the heart. I think I have also observed two distinct species of disease in the lungs of consumptive persons; the one spreading through the whole substance of the lungs, the other confined to the lymphatic glands at their root. The former patients have more cough, pain, and shortness of breathing, so that the disease is soon understood; the latter have the disease proceeding insidiously, with little pain, difficulty of breathing principally observed after exercise: the termination of this last species is also remarkable. It either carries the patient off by a violent and sudden expectoration and hectic, or the matter is discharged, the sore heals, and the disease seems, although unexpectedly, to have disappeared. But perhaps I am telling what is told in every pamphlet on this subject; as I have no leisure for such reading, and more observations on this point may be on that account useless. Again—It has not occurred in my practice to see any good effects from medicinal applications to scrophulous sores; keeping the parts in a warm and equable temperature, and exciting an increased action of the blood-vessels in the skin of the adjoining parts, are the only methods which I have observed to produce any improvement in the sores. Sometimes scrophulous inflammations are rendered less active by inducing more powerful inflammations in their vicinity. This disease appears, to my mind, in its origin, connected with the diminution of the animal heat, either of the whole body, or parts of it. There is a debility in the powers which circulate the blood; there is a defect in the reciprocal duties of the arterial and absorbent systems; coagulated lymph is deposited

deposited in weak parts, where it is neither perfectly organized by arteries and veins, nor modelled in its form and quantity by the absorbents; in this state it remains out of the reach of the actions of the living body, and undergoes the same sort of change as coagulated lymph is known to do, when retained for a length of time in circumscribed living cavities. This cheesy substance in process of time becomes stimulating, produces inflammation, secretion of the surrounding parts, its own solution, &c."

We have thought proper to insert the above observations of Mr. Carlisle, as being interesting to medical men, although we cannot conceive how such suggestions are calculated to instruct those who are *not* of the profession.

SCOTLAND.—Dr. Beddoes has here extracted a *mass of reports* (occupying eighteen pages,) from the Statistical Reports of Scotland, published by Sir John Sinclair, to prove that *women, especially those who follow still employments, and men engaged in the almost feminine occupations of the clothing manufacture, become frequently consumptive: whereas the husbandman and the shepherd, being obliged to expose themselves incessantly to the vicissitudes of the climate, and untaught to employ any precautions against the effect of these vicissitudes, either become crippled by the rheumatism, or wear out a wretched existence under the constantly returning pains of this severe disease.*

"GENERAL INFERENCE.—On a review of the whole of the preceding facts, two different conclusions offer themselves to our consideration. *Certain classes are less liable than others to consumption, either because the exhalations to which they are exposed preserve the lungs in a healthy state, or because they acquire, from their mode of life, a habit less susceptible of the complaint.*

"It would be rash to assert, that no sort of exhalations have a preservative power. The case of the manufacturers of catgut, though it requires further examination, stands in strong opposition to such an inference. It would be no forced

forced construction of the evidence respecting butchers, and perhaps of that respecting fish-women, to impute the degree of security which they enjoy to the same cause. It may be supposed that seamen are rendered less susceptible by the odour of tar. But this supposition, even though no other facts remained to be accounted for, would, I apprehend, afford little satisfaction to those who consider the circumstances with attention. The total difference between the nature and abundance of the fumes to which catgut-makers, butchers, and perhaps fishwives, though in very different degrees, are exposed on the one hand, and sailors on the other, takes away greatly from the probability of the opinion. Though the copious, gross, and palpable exhalations of putrefying animal substances, should have a specific power of preventing pulmonary ulceration, we cannot, for this reason, presume any thing in favour of the mere smell of tar. Two distinct materials applied to the lungs, are not more likely to produce a common effect than two distinct materials applied to the stomach. Nor does experience of animal nature offer analogies which can justify us in believing, that a minute portion of odoriferous matter, however it may stimulate the olfactory nerves, should be capable of acting with effect on an organ so inirritable as the lungs. And when we attend to the remainder of the class that appears less liable to consumption, the hypothesis fails us altogether.

“ Waving the example of the manufacturers of catgut, the others are easily understood: the butcher, the fishwife, the sailor, the keelman, the husbandman, and the shepherd, have somewhat of a common constitutional character. They compose the most robust part of the community. And if we abstract from external violence, and internal mechanical injury, whom do we find predisposed to consumption? whom, but the puny by descent, by diet, by

sex, by occupation? In this point the facts on both sides meet; on any other principle they are irreconcilable.”

PARTICULAR CONSIDERATIONS. — Of the observations here delivered, the author wishes it to be understood, that they can only with propriety be adopted in practice, where there is feebleness of constitution, without formed disease: for cases of hereditary predisposition joined to feebleness of constitution, he is of opinion, do not require any peculiar system of rules.

DIET.—The author refutes the prevailing sentiment, that the English eat more animal food than other nations, and (with good reason we think) gives it as his opinion that the persons most free from consumption are “precisely those who consume most animal food. Their healthfulness is undoubtedly not to be imputed to this circumstance alone; but it is to be presumed that their substantial diet has its share in determining their personal condition.

“We may adopt this conclusion with the greater confidence, because it is powerfully supported by analogy. We observe that a large proportion of the consumptive, either in the earlier part of life, or at the very time when the chest suffers, are affected with scrophula or king’s evil; a disorder which shews itself by slow, indolent swellings of the glands, by pale ulcers with thick turned up edges, and by other well-known signs: so that the appearance of scrophula is justly regarded as a sign of the consumptive habit. When children are fed upon vegetables, with little or no admixture of animal food, they die in great numbers of scrophulous affections. In the families of the poor, who *cannot* command better aliment, this is one principal cause of mortality; and in the families of the rich, who in consequence of erroneous medical notions sometimes *will not* allow a proper proportion of animal food, scrophula often takes place (though in a slighter degree, for it is checked by
other

other circumstances,) and the foundation of consumption is laid. ‘ There are (as a writer of superior merit on the king’s evil observes,) among the higher classes, some who keep their children to the fifth, or even the seventh year, upon a strict vegetable and milk diet, believing that they thus render the constitution a signal service. I have, however, frequently pointed out to parents, whom I have heard boasting of the advantages of this management, either an enlarged abdomen, or some other sign of incipient scrophulous indisposition, which has convinced them that their children were far from being so healthy as they supposed. In our temperate latitudes a diet of this kind is certainly not proper after the age of two years. Where a feeble constitution coincides with an hereditary disposition to scrophula or rickets, tender meat and soups are particularly serviceable. Dr. Weikard perfectly agrees with me in opinion. He observes that children brought up according to the fashion of the great (without animal food,) are particularly liable to the rickets. Dr. Kæmpf attests, that by animal diet he has restored a great variety of children who had been dreadfully reduced by water-gruel, milk, and vegetables. Dr. Vogel also asserts, that animal food is falsely held to be a cause of atrophy, and that children, from whom such food is withheld, oftener fall into an atrophy than those to whom it is allowed.’ (*C. G. T. Kortum de Vitio scrophuloso*, I. 3. 50.) These testimonies may be received with the fuller assurance, because in other respects the authors are strongly disposed in favour of that theory, which still not unfrequently deludes English parents with the false hope of rendering the blood of their children pure, and their humours mild, by millet pudding, and by other preparations of vegetable substances in over-proportion.

“ That a diet in a great measure vegetable should be the most wholesome (or not unwholesome,) in tropical regions, where

where scrophula and consumption are little known, and that it should agree well with a few individuals in this country, can be of no importance to the present investigation.

“ In cases, therefore, where habitual weakness or the history of the family gives reason to apprehend consumption, one of the most indispensable rules of preservation is, to *use animal food freely*. There seems no limit to the quantity, but the indications furnished by the palate, and the power of the digestive organs. More should not be given—more will not be long taken—than is fully relished. A few surfeits will not be followed by the least injury. The ready sickness of children is the natural cure of their indigestions, and has the appearance of a provision against the voracity and inexperience of that age. Feeling, assisted by observation, will soon fix the just measure of aliment. In addition to a nutritious dinner, children, after their fourth or fifth year, should be allowed a moderate quantity of solid animal food, or of good soup, once a day. Abstinence from vegetables I by no means recommend; and (to repeat an essential caution,) what has now been said is to be understood of the ordinary state of health. In sickness, the diet must be varied according to the exigency of the case.”

“ EXERCISE.—It does not,” says the author, “ require nice observation to be satisfied, that *exercise is necessary to give effect to diet*. Between the opposite examples, adduced in the former part of this essay, the most striking difference, perhaps, consists in the activity or inactivity of the parties: those less liable to consumption being obviously the more active, and those more liable, the less active. This is strongly illustrated by the history of the health of the sexes.

“ We find also that scrophula rarely affects the active and well-fed. Women have long been observed to be more subject to scrophula, for which Dolæus superstitiously accounts by supposing that Providence deforms the neck of females with morbid excrescences, to punish their vanity in displaying

this

this part encircled with costly ornaments. Dr. Kortum well observes, that this doctrine requires considerable restriction, since in childhood both sexes are treated pretty much alike. Boys and girls keep company; they run together, they jump together, and dig together. It is not till after that unfortunate æra, when the girl is taken up to be manufactured into a lady, that every thing conspires to prevent her organization, originally perhaps more feeble, from acquiring a healthy force of action. I have been sometimes tempted to think, that a period nearly equal to that of female education is required before the constitution can be undermined, and the lungs thrown into a state of complete disease; and that this is one reason why consumption is so common about the age of puberty."

Dr. Beddoes very justly reprobates the want of exercise at boarding-schools,—sedentary employments, as reading novels,—intense application to music, and observes that "boys, though not so strictly immured, are not in general suffered to take near exercise enough. Nature, for the most beneficial purposes, seems in our early years to have combined two propensities; activity and curiosity; the desire to exercise our limbs and our senses. And parents will perhaps come at length to discover that the best method of cultivating the understanding, provides at the same time most effectually for robustness of constitution; and that the means of most completely securing both parts of the comprehensive wish of the satirist:

—ut sit mens sana in corpore sano—

are inseparable. After making this discovery, they will assuredly cease to sacrifice their children's faculties of mind and body to the idle grammatical subtleties of schoolmen and monks."

"On the Subjects of DRESS AND HABITATION.—About seven years ago, in treating of catarrh, I observed: 'It has
' been

“been unfortunate for the inhabitants of this country, that
“we are not subject to such a continued severity of cold as
“should oblige us regularly to fortify ourselves by warm
“clothing. By linen worn exclusively, we lose more in
“health than we gain in comfort; which comfort is, per-
“haps, after all merely imaginary; for there is hardly an
“instance in which the skin does not reconcile itself to
“woollen, though there is no necessity for placing it next
“the skin, and cleanliness is just as much in the power of
“the wearers of woollen. The most simple and effectual
“method to avoid the influence of sudden changes of at-
“mospherical temperature, is to wrap the body in substances
“that conduct heat slowly. Both for this reason, and be-
“cause it is so much less unpleasant when moist, flannel
“should be worn at least above linen during every season in
“Great Britain; and those who find it necessary, may double
“it during the winter, spring, and beginning of summer.”

“It should seem, however,” continues our author,
“that unless we could prevail upon ourselves to make our
apartments, by degrees, more temperate and more open,
warmer clothing would be but a small advantage. Indeed,
if worn within doors, I apprehend it would be a disadvan-
tage. Our ladies, however, would undoubtedly save them-
selves some suffering by ceasing to ‘expose themselves,
‘half-undressed, to the fogs and frosts of our island.’ Ad-
ditional covering in cold weather and cold places will not, it
is true, render the system more hardy, but it will often
prevent injury for the time.

“It would be dangerous suddenly to lower the tempera-
ture to which the feeble or the delicate have been long ha-
bituated. But sixty degrees of Fahrenheit’s thermometer
should perhaps never, even at present, be exceeded. By
gradual reduction we should, I suppose, without unpleasant
sensations, be well able to bear a temperature of fifty de-
grees. In effecting this change, attention must be paid to

two circumstances. A fashion of warmer clothing must be introduced, and contrivances for keeping the feet warm must be adopted. An apparatus of great elegance might be invented, upon the Dutch principle: or the feet, when cold, may be placed upon a close tin vessel, containing warm water. In various kinds of indisposition, attended with cold extremities, I have for some years recommended, with manifest advantage, a tin *foot-warmer*; and I understand they are now manufactured of a convenient form, by Lloyd, near Norfolk Street, Strand, London.

“ How far close, heated apartments, which appear so injurious by rendering the lungs incapable of bearing the impression of cold, contribute upon the whole to comfort, the purpose for which they are immediately designed, is exceedingly doubtful. No human being can be always sheltered from the rigour of our climate; and there is a well-known law of sensibility, which continually tends to render the expedients of indolence abortive. On this subject I hope I may be allowed to produce a passage from one of my former publications, as I still entertain exactly the same sentiments.

“ ‘ In aid of delicacy of constitution, art has engaged
‘ in many a contest with nature. The carpetted flooring,
‘ stuccoed walls, and double doors of modern apartments,
‘ are intended as its screen. But these, even if they were
‘ to be reinforced by the double windows of the North,
‘ would be an unavailing protection. Nature, brandishing
‘ her scourge, pursues with quicker steps than those who
‘ forsake her ordinances can retire. The susceptibility of
‘ impression increases faster than ingenuity can bar out ex-
‘ ternal agents; and in the best secured fortress of effemi-
‘ nacy, it is the fate of the occupant to shiver more at the
‘ inclemencies of the seasons, than the mountaineer who
‘ is exposed to all the blasts of winter’.”

(To be concluded next month.) -

ART. II. *Biographia Medica: or, historical and critical Memoirs of the Lives and Writings of the most eminent medical Characters that have existed from the earliest Account of Time to the present Period; with a Catalogue of their literary Productions.* By BENJAMIN HUTCHINSON, Member of the Medical Society of London, of the Physical Society of Guy's Hospital, and of the London Company of Surgeons. In two vols. 8vo. JOHNSON, London. 1799. Price 16s. in boards.

IT highly concerns most men to be acquainted with the history of the art or profession to which they belong, but especially practitioners in medicine. The annals of physic can alone inform us by what route our predecessors walked, and by what obstacles they were impeded in the art of healing. The history of OUR profession is not only instructive, as it throws light on the treatment of diseases, but is also amusing, as it affords curious anecdotes for our reflection in an hour of fatigue or *ennui*.

Medical biography is a subject which has been too little cultivated in England; and we were in hopes, when we took up the volumes now under consideration, that we should have found an undertaking at least *equal* to what has been published in other countries. The materials from whence an industrious writer might compile a work of this kind, suited to the present advanced state of medical science, are neither scanty nor difficult to be obtained. We were therefore extremely disappointed, on perusing the "BIOGRAPHIA MEDICA," to find so meagre and imperfect a compilation as it appears to be in reality. But let us see what the editor professes to have done.

It is suggested by Mr. Hutchinson, that although "the voluminous works of Mangetus, as well as the writings of Le Clerc and Freind, on a subject nearly similar to the present, are highly valuable *so far as they advanced,*" yet many
names

names were wanting of eminent persons who had not hitherto graced the page of biography. The necessity of supplying the deficiencies of our predecessors must be granted ; but while we attempt this, let us not bury in oblivion the remembrance of great men whom former historians have recorded with honour. Mr. H. has done well in adding a few valuable articles ; but the histories he alludes to, so far as they advanced, are as much superior to his own as Dr. Johnson's Dictionary, or that of the Italian Academicians, is to the Epitome of Nugent.

The title-page of this performance taught us to expect “ historical and critical memoirs of the lives and writings of the *most eminent* medical characters that have existed from the earliest account of time to the present period.” In the preface, nearly similar professions are held out. “ The compiler has been particularly attentive,” he tells us, “ to do justice to the learned and ingenious *of all countries*, whose public works or private professional characters are held in high estimation.” Again, he says, this work is “ intended to contain some account of *most medical men*, who have been sufficiently distinguished to merit such a memorial of their abilities.”

Instead of finding these pretensions realized, we discover traits of the most extraordinary negligence in this respect : practitioners of all countries, (we could almost say the greater part of the men of fame or of talent,) who have already acquired an honourable place in the annals of medicine, and whose writings entitle them to our grateful acknowledgments, have been totally passed over ; so that even their names do not appear on Mr. Hutchinson's list of worthies. If these omissions had been obvious only in ten, fifty, or even an hundred instances, we should not have expressed ourselves in terms so marked and severe.

Although we cannot afford room for a long catalogue of the omissions here alledged, the public will perhaps expect
to

to be made acquainted with *a few* of the names which the editor has overlooked;—we therefore subjoin the following, as a scanty list, containing some of all countries and ages.

Alston	Digby	Glanville	Limbourg
Albertus	Dale	Goelicke	Lobb
Asclepiades	Dickson	Gouan	Louis
Averroes	De la Faye	Goulin	Morton
Almeloveen	De Vigo	Guglielmini	Macbride
Aristotle	Du Verney	Gibbes	Mayow
Allen	De la Motte	Guinther	Maynwaring
André	De Haen	Gunz	Middleton
Anel	Democritus	Goulard	Morley
Bromfeild	Dolæus	Hawkins	Magatus
Bacon	Dodonæus	Hooke	Maitre Jean
Boyle	Deventer	Horne	Marchetti
Blair	Devaux	Hahn	Massa
Bianchi	Drelincourt	Hales	Matthiolus
Belloste	De Gorter	Hannemann	Munnicks
Barchusen	De Vega	Hartmann	Meeckren
Bartholin	Eustachius	Hartsøeker	Mundinus
Borelli	Empedocles	Havers	Mudge
Baumé	Eloy	Heraclitus	Musitanus
Bernard	Erasistratus	Hérissant	Maitland
Blancard	Esculapius	Hildanus	Martine
Blegny	Else	Hotton	Mazini
Buc'hoz	Freke	Hunauld	Meibomius
Barbette	Floyer	Justamond	Mercklin
Clifton	Fuller	Jovius	Mery
Cockburn	Fordyce	Juncker	Mesue
Casp. Hoffman	Faber	Jebb	Michaelis
Catesby	Falconet	Kaau-Boer-	Monti
Cole	Franck	haave	Morel
Columna	Franco	König	Muys
Camper	Freitag	Lommius	Mynsicht
Castellus	Fuchius	Littre	Needham
Camerarius	Gooch	Le Dran	Norton
Carrere	Gregory	Le Clerc	Newton
Chapman	Gataker	Luisinus	Neumanri
Clusius	Gaubius	Le Cat	Nihell
Cocchi	Guido de Cau-	Lorry	Nunnez
Colbatch	liaco	Lacuna	Oribasius
Conringius	Glauber	Langrish	Oviedo
Croone	Gorræus	Levret	Platerus

Pauw	Roland	Simon	Vicq d'Azyr
Platner	Rondeletius	Simpson	Valesius
Portal	Roonhuyzen	Smith	Vidus Vidius
Pomet	Rudbeck	Sperling	Veslingius
Pliny	Rufus	Spigelius	Vacher
Palladius	Shaw	Stalpart	Valentine
Papin	Sharp	Stephens	Vallisnieri
Pereira	Slare	Storck	Vater
Peyrilhe	Stark	St. Yves	Vaughan
Pictor	Strother	Turner	Verdier
Pison	Scheele	Tyson	Vernage
Pistorius	Schenkius	Tulpius	Wiseman
Pitard	Scultetus	Themison	Whytt
Puzos	Sagar	Taliacotius	Waller
Plunket	Sauvages	Theophrastus	Willoughby
Portius	Shebbeare	Torella	Walther
Poupart	Stonehouse	Taylor	Wepfer
Purmannus	Stohl	Thebesius	Winslow
Prevost	Servetus	Theodoric	Welsch
Pythagoras	Senac	Thessalus	Wagstaff
Quincy	Sabatier	Thompson	Wédel
Ray	Salicetus	Tissot	Wells
Rutty	Saviard	Tozzi	Wharton
Ridley	Schelhammer	Tralles	Wilson
Rhasis	Schulze	Trincavelli	Wolf
Riverius	Scribonius	Turnbull	Woolhouse
Rau	Sebizius	Twyne	Wurtz
Regis	Séguier	Uffenbach	Ximenes
Richard	Serapion	Verduc	Zacchias
Riolan	Sherard	Verheyen	Zuinger
Ripley	Short	Vieussens	Zeno
Roederer	Shirley	Vogel	Zeller
Rogers	Sigault	Van Swieten	Zinn

Our readers may not agree exactly in determining which of the above authors should be noticed in a modern biographical dictionary; but they will, doubtless, allow that we have abundant room to censure the carelessness of Mr. Hutchinson, in omitting not only ALL THESE, but some HUNDREDS MORE OF EQUAL CELEBRITY!!!

“Anxious to obtain a *more complete history* of the origin and progress of medical science,” Mr. H. has been induced to undertake the *Biographia Medica*. If our readers

expect, in these volumes, to meet with a “*complete history*” (or half so valuable an history as we already possess) of the “origin and progress of medical science,” their hopes will be egregiously disappointed. Instead of this, they will find a number of uninteresting facts, domestic anecdotes, and ill-authenticated occurrences; and the best pages of the work are not Mr. Hutchinson's, but have been undoubtedly borrowed from sources to which we are not always explicitly referred.

The next point of importance in which the editor fails is, in giving (as he promises in the title-page) “*a catalogue of the literary productions*” of authors whose names he has condescended to admit into his memoirs. Surely the writings of FABRICIUS AB AQUAPENDENTE, HOFFMAN, HEISTER, Baron HALLER, and other men of equal rank, are not too insignificant to be enumerated! But it would be tedious to enter minutely into the bibliographical defects and errors of this production.

The compiler professes, moreover, “in the execution of his plan,” not to have “recurred to dictionaries only, nor contented himself with supplying the defects of one dictionary from another, and cutting off the redundances of all,” but also to have “*collected every thing* from the different performances which contained materials relative to the plan.” We fully agree on the propriety of his recurring to the writings of different authors at first hand, and to the original memoirs of their lives, wherever they are accessible; but, it must be confessed, a very small proportion of the merit of Mr. H. appears to have been of this description. We are able to discern but few marks of diligent reading or research, and even little of judicious compilation. Rather than charge him with making too much use of dictionaries and common-place books, we incline strongly to believe he has not cast his eye over a tenth part of the valuable performances of this nature, which
might

might have greatly assisted him, and shortened his labours. This persuasion is grounded on our review of the work before us; wherein by far the majority of the lexicographers and historians, who would have largely contributed to enrich his volumes, are so entirely overlooked, that even their names are not entered on his catalogue.

If “to preserve memoirs of illustrious men,” as Mr. H. observes in his preface, be “discharging an act of *justice* to departed merit;” we may add likewise, that to suppress, conceal, or wilfully to neglect, the “memoirs of illustrious men,” is committing an act of *injustice*.

“The compiler thinks it necessary to mention, that there are omitted in these volumes memoirs of *some* distinguished persons which he has not yet been able to collect;” but he promises that they shall be “introduced into a future edition, if, by the favour of the public, another should be called for;” and in this case, says he, “they will be printed separately, for the use of the purchasers of the first.” These omissions, however, are so very numerous, that it would be far better, in our opinion, to arrange the whole of his materials *de novo*, than merely to supply the possessors of this work with an additional octavo volume.

To conclude, we suggest only one defect more in the *Biographia Medica*. Among the authors of character whom Mr. H. has mentioned, there is scarcely any respect paid to *comparative merit*: men of distinction are frequently passed over with a very superficial notice, while others of inferior rank have been honoured with a memoir of several pages in extent; and this disproportion, we think, is too commonly in favour of *English* practitioners. A work of this nature should be conducted without partiality for any nation or class of persons, except what their literary fame and intrinsic merit entitle them to.

If Mr. H. have ability to execute the Herculean task of compiling such a biographical performance as the present

age demands; we recommend him not only to consult all the principal journals, reviews, literary gazettes, orations and eulogies, historical dictionaries, transactions of learned societies, &c. &c. but also to avail himself of the memoirs and histories written by different authors who have preceded him. The chief writers of this class (including a few bibliographers) are, Adam, Aikin, Almelooven, Astruc, Baron, Barchusen, Blumenbach, Boerhaave, Borden, Brunfelsius, Carrere, Castellan, Le Clerc, Conringius, Coray, Creutzenfeld, Eloy, Etienne, Freind, Girodat, Girtanner, Gmelin, Goelicke, Goulin, Gruner, Haller, Hazon, Hebenstreit, Heister, Hensler, Du Jardin, Justus, Kestner, Küchn, Lipenius, Mangetus, Matthias, Mercklin, Murray, Ploucquet, Portal, Schulze, Seguiet, Spachius, Sprengel, De Thou, and Zacutus Lusitanus. In perusing the respective labours of these men, a variety of subordinate resources would be discovered; which, all together, will abundantly recompense his inquiries, and furnish an immense stock of the very best materials.

If we were to name an author whose plan might upon the whole be taken as a model, or at least as the basis, of a new biographical dictionary, we think M. ELOY would be referred to; although in several respects his excellent work admits of improvement: Vide "*Dictionnaire historique de la Médecine ancienne et moderne; ou Mémoires, disposés en Ordre alphabétique, pour servir à l'Histoire de cette Science, et à celle des Médecins, Anatomistes, Botanistes, Chirurgiens, et Chymistes, de toutes Nations.* Par N. F. J. ELOY," &c. &c. printed at Mons, 1778, four volumes 4to. But we deem it indispensably necessary, for any gentleman who shall undertake so difficult and arduous a task, to consult and compare the greater part of the authors above recited, especially the more modern of these; some of whose productions are even more extended and voluminous than the Dictionary of M. ELOY.

Z.

ART.

ART. III. *An Account of the regular Gradation in Man, and in different Animals and Vegetables; and from the former to the latter.* Illustrated with Engravings adapted to the Subject. By CHARLES WHITE. Read to the Literary and Philosophical Society of Manchester, at different Meetings, in the Year 1795. Quarto. pp. 146. DILLY, London. 1799. Price 10s. 6d.

EVERY one who has made natural history an object of study, must have been led occasionally to contemplate the beautiful gradation that subsists amongst created beings, from the highest to the lowest: Mr. White's object, in the present publication, is to present the world with a collection of facts on this interesting subject. The work is divided into four parts.

The FIRST PART contains *Observations on Gradation in general,—on the Genus of Animals called Canis by Naturalists,—on Apes and Birds.* The opinions of Hunter, Buffon, Dr. Bell, Dr. Percival, Dr. Watson the Bishop of Landaff, Lavater, Bonnet, &c. are adduced respecting the want of sufficient marks of distinction between the three kingdoms of nature; after which some observations of the author, and extracts from naturalists, are delivered concerning the form, habits, manners, functions, and peculiarities of several animals. The inferences which the author deduces from the whole are as follows:

“That there is a general gradation from man through the animal race; from animals to vegetables, and through the whole vegetable system. By gradation, I mean the various degrees in the powers, faculties, and organization. The gradation from man to animals is not by one way; the person and actions descend to the orang-outang, but the voice to birds, as has been observed.

“That there are many quadrupeds, insects, birds, and fishes,

fishes, which appear to be created for particular climates, and cannot live in any other.

“That many animals and vegetables exist in the old world, which were not found in the new one, when discovered by Columbus; and that there are many animals and vegetables found in the new world, which were never known in the old.

“Lastly, that those animals which were common to both worlds, were only to be met with in the northern hemisphere, in which the new and old world had probably communications near the north pole. These animals were about twenty-six in number.”

PART SECOND. *On the Gradation of Man.* The author here enters into the general gradation of the chief and lord of the creation. “I had observed,” says he, “that the arms were longer and the feet flatter in apes than in the human species; and, having the skeleton of a negro amongst others in my museum, I measured the radius and ulna, and found them nearly an inch longer than in the European skeleton of the same stature. The foot of the negro I perceived to be much flatter: the *os calcis* also differed from that of the European both in length, breadth, shape, and position, not forming an arch with the tarsal bones, but making with them nearly a straight horizontal line.” (Mr. W. gives a drawing to illustrate his observations.) “These remarks encouraged me to proceed in my investigation. I did not carry my inquiries into provincial or national varieties or features, but confined them chiefly to the extremes of the human race: to the European, on the one hand, and, on the other, to the African, who seems to approach nearer to the brute creation than any other of the human species. I was persuaded, that if I could prove a specific distinction betwixt these two, the intermediate gradations would be more easily allowed.

“I next examined the skull, and found the frontal and occipital

occipital bones narrower in the negro than in the European; the *foramen magnum* of the occipital bone situated more backward, and the occipital bone itself pointing upwards, and forming a more obtuse angle with the spine in the former, than in the latter. The internal capacity of the skull was less in the former; and the fore parts of the upper and lower jaw, where they meet, were considerably more prominent. In the negro, the depth of the lower jaw, betwixt the teeth and the chin, was less; and that of the upper, betwixt the nose and the teeth, was greater: the distance from the back part of the *occiput* to the *meatus auditorius* was less, and from thence to the fore teeth was greater. The fore-teeth were larger, not placed so perpendicularly in their sockets, and projecting more at their points than in Europeans: the angle of the lower jaw was nearer to a right angle, and the whole apparatus for mastication was stronger. The bones of the nose projected less. The chin, instead of projecting, receded. The *meatus auditorius* was wider. The bony sockets, which contained the eyes, were more capacious. The bones of the leg and thigh more gibbous: and, by the marks which were left upon the skull, it plainly appeared that the temporal muscles had been much larger.—In all these points it differed from the European, and approached to the ape.

“ I wish it to be particularly understood that I consider the chin of the negro as deserving peculiar attention. This part has either not been properly characterised, or the account has not been much understood. It is said by some that the chin of the negro projects: the reverse, however, is the fact; for, beside that the distance of the fore teeth from the bottom of the chin is less than in the European, the lower part of the chin, instead of projecting outward, retreats, or falls back, as in the ape.”

Mr. White here subjoins a very compendious view of the measurements of nine European skeletons, &c. &c. which we take the liberty of copying.

MR. WHITE'S COMPARATIVE TABLE OF SKELETONS, &c.

Stature Os humeri Ulna	Mr. White's female European.	Mr. Ward's male ditto.	Mr. Wood's male ditto.	Mr. Nanfan's male ditto.	Mr. Wood's 2d male ditto.	Mr. Longworth's female ditto.	Mr. Crozier's female ditto.	Mr. Foxley's male ditto.	Manchester Infirmary female ditto.	Mr. White's male Negro.	Dr. Tyson's Pigmy male.	Mr. White's Monkey.
	F. 5 I. 8½ 12½ 10	F. 5 I. 8 13 9¾	F. 5 I. 7 12¼ 9¾	F. 5 I. 5½ 13 10⅞	F. 5 I. 5 12½ 10	F. 5 I. 4 12 9½	F. 5 I. 3⅞ 12⅞ 10	F. 5 I. 3⅞ 12⅞ 10	F. 5 I. 5 12½ 10¼	F. 4 I. 11½ 11 9¾	F. 1 I. 9 5½ 5½	F. 2 I. 2 4¼ 5
	Lunatic Hospital, Liverpool.	Glazier, from the Gold Coast.	John Gilman, Sta. Cruz.	Spotted, or blotched Jamaica.	Tho. Rogers, Long Island, mother tawney.	Jamaica Regiment of Dragoons.	Wm. Layland, Anamabol.	North Virginia.	Castleman, Jamaica.	Ld. G. de Wilton's Royal Lancashire Anamabol.	Barbadoes.	Henry John.
Stature Upper arm Fore arm	5 10½ 15 12¾ No frænum.	5 8 13 12¼	5 8 13½ 11¾	5 7 13 11 No frænum	5 6 13 11 No frænum	5 6 12¼ 10¾	5 6 12¼ 11	5 5 13½ 11¾	5 4¾ 12 11	5 4¼ 12½ 10½	5 12¼ 13 11	5 5 12 10½ No frænum.
White Europeans.	Mr. W's Butler.	Mr. W's Gardener.	Mr. W's Coachman.	Mr. W's Footman.	Apothecary Lying-in Hospital.	Mr. B.	Mr. J. B. W.	Mr. W.	Dr. T.	Jarvis, Hair-dresser.	House Surgeon, Infirmary.	Porter, Lying-in Hospital.
	5 11½ 15 11	5 9½ 14 11	5 8 13½ 10½	5 8 13½ 10⅙	5 7½ 13½ 10½	5 7½ 13½ 10½	5 7¼ 12¾ 10	5 7¼ 12¾ 10	5 7 12¾ 10	5 5¾ 13½ 10¾	5 4½ 12½ 10⅙	5 5 12½ 9¾
	Stature Upper arm Fore arm											

“ The following measurements were taken from three of the tallest soldiers in Captain Horton’s grenadier company of Royal Lancashire Volunteers.

<i>Grenadiers,</i>	Daniel Lees		Robert Lees.		John Shepley.	
	F.	I.	F.	I.	F.	I.
Stature	6	4 $\frac{1}{2}$	6	1	6	0
Upper arm		16		15 $\frac{1}{2}$		15
Fore arm		12 $\frac{1}{4}$		11 $\frac{5}{8}$		11 $\frac{3}{8}$
	John Harris.		Joseph Bamford.		James Peatfield	
	F.	I.	F.	I.	F.	I.
Stature		36 $\frac{1}{2}$	6	2	6	2 $\frac{1}{4}$
Upper arm		15 $\frac{1}{4}$		15 $\frac{1}{4}$		15 $\frac{1}{4}$
Fore arm		11 $\frac{3}{4}$		11 $\frac{1}{4}$		11 $\frac{1}{2}$
	John Lee (a Lascar.)		A tawney Woman.		Cast of the Jew at So- merset-house.	
	F.	I.	F.	I.	F.	I.
Stature	5	4	5	4	5	8
Upper arm		12 $\frac{3}{4}$		12		14 $\frac{1}{2}$
Fore arm		10 $\frac{1}{2}$		10 $\frac{1}{4}$		11
	Venus de Medicis.		European Women.		European Women.	
	F.	I.	F.	I.	F.	I.
Stature	5	0	5	4	5	0
Upper arm		13 $\frac{1}{2}$		13		12 $\frac{1}{4}$
Fore arm		9 $\frac{3}{4}$		9 $\frac{3}{4}$		8 $\frac{3}{4}$

Mr. White then quotes the opinions of Lavater and Camper, on the varieties of the cranium of different nations; and proceeds thus: “ After having compared my negro skeleton with the European, I was obliged to pursue the comparison with a great number of living subjects, before any fair induction could be obtained. Accordingly, I measured the arms of about fifty negroes;—men, women, and children, born in very different climates; and found the lower arm longer than in Europeans, in proportion to the upper arm and to the height of the body.—The preceding

ceding table contains the measures of the first twelve negroes I met with, and also of the first twelve Europeans, of nearly corresponding stature that I measured, beginning with those of my own family ; so that no selection was made in either case for the purpose of serving an hypothesis. I took the following method to measure the fore arm. I applied a pair of callipers to the extremity of the elbow, and to the lower extremity of the *ulna*, where it is joined to the wrist ; by which the length may be accurately obtained. But it is not so easy to find the length of the *os humeri* in a living subject. I contented myself with applying one end of the callipers to the extremity of the elbow, and the other end just below the *acromion* : the distance gave the length of the *os humeri*, together with the thickness of the *ulna*, at its upper part ; but, as all were measured in the same manner, this circumstance is immaterial. By a careful admeasurement I found, that, not only in the twelve, but in *all* the negroes, the length of the lower arm was greater than in those of Europeans corresponding in stature. I am informed, however, of a negro skeleton in St. Bartholomew's Hospital, in which the *radius* and *ulna* are no longer than the medium of Europeans : But as Africans, as well as Europeans, are liable to some variation in this particular, one or two exceptions have no force against the general inference.

“ Living subjects are always more to be depended upon than skeletons, for two reasons : first, the bones may be changed in preparing or in mounting them ; and, secondly, the stature of the skeleton is entirely governed by the manner of putting together the bones of the spine.

“ The first negro on the list, is one in the Lunatic Hospital in Liverpool. His fore arm measures twelve inches and three quarters, and his stature is only five feet ten inches and a half. I have measured a great number of white people,

people, from that size up to six feet four inches and a half; and, amongst them, one who was said to have the longest arms of any man in England; but none had a fore arm nearly equal to that of the black lunatic.

“ I measured the lunatic myself, in the presence of several gentlemen of the faculty, at the hospital; but after my return from thence, finding the measure of the arm to exceed all others so much, I was afraid of a mistake; and wrote to a medical man of the infirmary, desiring the lunatic might be measured again. This was done; and two pupils at the infirmary sent me a note, of which the following is a copy :

	f.	in.
‘ Height of the black at the Asylum	5	10 $\frac{1}{2}$
‘ Length of the <i>humerus</i> - - - -		15
‘ Length of the <i>ulna</i> - - - -		12 $\frac{3}{4}$

“ I have measured the arms of a great number of European skeletons, and have found that the *os humeri*, or upper arm, exceeds in length the *ulna*, which is the longer bone of the fore arm, by two or three inches; in none by less than two, and in one by not less than three inches and one eighth. In my negro skeleton, the *os humeri* is only one inch and one eighth longer than the *ulna*. In Dr. Tyson’s pigmy, the *os humeri* and *ulna* were of the same length; and in my skeleton of a common monkey, the *ulna* is three quarters of an inch longer than the *os humeri*: so that, in respect to the fore arm, the gradation is as regular as possible.

“ I next examined the feet of living blacks, of men, women, and children, born in Liverpool, and clothed and educated as the other natives of that town are; these I found to be flatter than in Europeans. There was a difference also in other particulars: the bones of their thighs and legs were gibbous on the fore part; their fingers and toes were longer and smaller, but the thumb appeared shorter

shorter and smaller. Upon the whole, therefore, I think it cannot be doubted, that, from whatever cause it may arise, there actually subsists a characteristic difference in the bony system, betwixt the European and the African. This difference exists in the skull, in the sockets for the eyes, in the nose, in the chin, in both the upper and lower jaws, and the position of the head upon the spine; also in the length of the fore arm, in the feet, and in the legs and thighs.

“ Having endeavoured to establish and illustrate the fact of a gradation from the European man to the brute; in respect to the bones, being that part of the system allowed to be least affected by climate, diet, customs, &c. we will now proceed to shew that a similar gradation takes place in the cartilages, muscles, tendons, skin, hair, sweat, catamenia, rank smell and heat of the body, duration of life, testes, scrotum, and *frænum præputii*, *clitoris*, *nymphæ* and *mammæ*, size of the brain, reason, speech and language, sense of feeling, parturition, diseases, and manner of walking; and likewise that a gradation takes place in the senses of hearing, seeing, and smelling; in memory, and the powers of mastication: but in these last particulars the order is changed, the European being the lowest, the African higher, and the brute creation still higher in the scale.

“ With regard to the cartilages, muscles, and tendons, we are not in possession of a sufficient number of comparative anatomical facts to allow us to state much. The cartilage of the nose in the negro is much broader than in the European, and still broader in the ape. The gastrocnemii muscles are smaller, and placed higher in the African than in the European; they are still smaller and higher in the orang-outang: in the monkey those muscles are totally wanting. The temporal muscles are larger in the African than in the European, and still larger in apes. The *tendo Achillis*

Achillis is longer in the African than in the European, and still longer in the ape.

“ The SKIN, including the *epidermis* and *rete mucosum*, is well known to be thicker in the African than in the Europeans, and still thicker in monkeys.

“ The HAIR of the head, chin, &c. is shorter and more woolly in the African than in the European, and still more so in monkeys.

“ The SWEAT.—Captains and surgeons of Guinea ships, and the West India planters, unanimously concur in their accounts, that negroes sweat much less than Europeans; a drop of sweat being scarcely ever seen upon them. *Simiæ* sweat still less, and dogs not at all.

“ CATAMENIA.—It is the general opinion of physiologists, that females menstruate in larger quantities in warm climates than in cold; twenty-four ounces being the quantity in the warmest climates, eighteen ounces in Greece, from ten to four in this country, and two ounces in the coldest, as Lapland. This may be true in Europeans, and in Creoles born of European parents, but I believe it is much otherwise in negresses. Apes and baboons menstruate less than negresses, monkeys still less, and sapajous and sagouins not at all.

“ The RANK SMELL emitted from the bodies of many negroes is well known; but it is much stronger in some tribes or nations than in others, and the strongest in apes.

“ HEAT.—This may be considered in two points of view; the capability of persons sustaining a warm or cold climate, and the natural temperatures of their bodies as indicated by a thermometer. West India planters have assured me, and all writers agree, that the negroes in the West Indies suffer more from the cold and moist weather, than from the warm and dry: cold renders them languid and dispirited, but heat revivifies them.—With regard to heat, in the second point of view, it has been said that
negroes

negroes are two degrees colder than Europeans. The practice of the luxurious Turk gives countenance to this, as he prefers a negress for summer, a fair Circassian for spring and autumn, and an European brunette for winter.

“ DURATION OF LIFE.—Negroes are shorter lived than Europeans. All observations confirm the fact, that the children of negroes are more early and forward in walking than those of Europeans; likewise that they arrive at maturity sooner. The males are often ripe for marriage at ten, and the females at eight years of age. Now, it is a general principle in natural history, that the more early any species of animals arrive at maturity, the shorter is the natural period of their life.

Citius pubescunt, citius senescunt.

“ That the PENIS of an African is larger than that of an European, has, I believe, been shewn in every anatomical school in London. Preparations of them are preserved in most anatomical museums; and I have one in mine. I have examined several living negroes, and found it invariably to be the case. A surgeon of reputation informs me, that about forty years ago, when he was pupil to the late William Bromfeild, Esq. he assisted at the dissection of a negro, whose *penis* was *ad longitudinem pollicum duodecim*. It was preserved in and deposited in Mr. Bromfeild's museum. Haller, in his *Primæ Lineæ*, speaking of the Africans, says, ‘*In hominibus etiam penis est longior & multo laxior;*’ but I say, *Multo firmior & durior*. In *simiæ* the *penis* is still longer, in proportion to the size of their bodies.

“ I found with some surprise, that the TESTES and SCROTUM are less in the African than in the European. They are still less, proportionally, in the ape. That the *penis* should be larger, and the *testes* and *scrotum* smaller, in the order thus stated, is another remarkable instance of gradation.

“ FRÆNUM

“ *FRÆNUM PRÆPUTII*.—I have examined twelve negroes, who had not been circumcised, but had the *præputium* complete and large, and in four of them there was no *frænum præputii*, nor the least preparation for one, nor any sign of their ever having had any; there was no appearance of ulceration or incision having taken place; and, upon the strictest inquiry, I could not find that any such thing had happened*. Six of them had very trifling ones, which hardly could be called bridles: the remaining two were as perfect as Europeans.”

CLITORIS and *NYMPHÆ*.—Mr. White is of opinion that there is no material difference discoverable in these parts from Europeans, the contrary of which was advanced by Dr. Sparrman respecting the Hottentot women. In the females of the ape and dog, the clitoris is still longer.

MAMMÆ.—The Hottentot and Greenland women have long and flabby breasts, in which respect they approach to the *simiæ*.

“ *SIZE OF THE BRAIN. REASON*.—The cavity of the skull, which contains both *cerebrum* and *cerebellum*, is less capacious in the African than in the European, and still less in the brute species. All the nations of Africa, and the inhabitants of the southern isles, have either very narrow skulls, the two parietal bones approaching near to each other; or they have a flat, receding forehead, and hind-head: and the bony sockets, which contain the eyes, are more capacious than those of Europeans. It has been observed already, that man has the largest brain of any animal; and, of all men, the European has the largest;

* “ I had since an opportunity of examining only one of the sons of these four (Thomas Rogers’s—see the preceding table,) and he had no *frænum præputii*.—This boy was only four years old: a convincing proof that the *frænum* was not destroyed by any venereal complaint.”

yet

yet some animals possess a larger brain in proportion to their body, as mice, squirrels, &c. and some birds.

“ We know so little of the physiology of the brain and nerves, that I shall not state much concerning them.— It should seem, however, from the observations made upon man, the elephant, and other creatures, that, generally speaking, those animals which have a greater quantity of brain, have also more reason, or sagacity.”

The author then considers the manner in which the human voice and speech are effected.

“ **SPEECH and LANGUAGE.**—Dr. Thunberg says, ‘ The language, which frequently is almost the only thing that distinguishes the indolent Hottentots from the brute creation, is poor, unlike any other in the world, is pronounced with a clack of the tongue, and is never written.’ Gamon says, ‘ The sound of their voice resembles sighing.’ Spitsbergh says, ‘ that their language resembles the clucking of a turkey.’ ”

“ In whatever respect the African differs from the European, the particularity brings him nearer to the ape. The LIPS, however, form an exception to this rule; and would have been a considerable infringement on the order of gradation, if the ape had been possessed of the faculty of speech. But as it is, the chasm betwixt the African and the ape, relative to speech, is so great, that we need not wonder at a change in the organization. With respect to this point, it may be remarked that since the mouth of the African protrudes more; since the distance is of course greater from the throat to the teeth, and all the appendages of the mouth, except the chin, are larger than in Europeans; it was perhaps necessary to have the lips larger, in order to strengthen or modulate the voice in speaking or singing. It is further observable, that such Europeans as have concave mouths, or are denominated in-mouthed, have all thin lips; and in such the distance from the
wind-

wind-pipe to the teeth is of course less than in those who are out-mouthed. Now it is found, that in wind instruments, both the length of the tube and the form of its extremity have an effect upon the sound: the longer the tube, the deeper will be the note; and the more divergent its extremity, the louder will be the sound. Out-mouthed people seem then to require thick divergent lips, in order to give force and energy to their utterance. All the other parts subservient to speech, and those subservient to mastication, being larger in the Negro than in the European, the distance of the teeth from the larynx being also greater, the tongue larger, the teeth stronger, and the nose broader, it should seem that proportion required the lips to be thicker, in order to give the best effect to the voice and articulation."

On the SENSE OF FEELING, Mr. White observes, "The cuticle, including *reticulum*, is much thicker and harder in black people than in white ones, the *reticulum* in the latter being a thin mucus, in the former a thick membrane.

"PARTURITION.—Hennepius says, 'The women retire to some private place when the time of their delivery is at hand, and return immediately after to their work.' As the same thing happens both in warm and cold climates, we cannot attribute it to relaxation from heat. It must, therefore, either be occasioned by the infants of people of colour having smaller heads, or the mothers having large and capacious pelvises, or from their living nearly in a state of nature, or, perhaps, from all these three causes. Mr. Soemmering says, the pelvis of the male Negro is smaller than that of the European; but he does not say what is the size in the female. Several surgeons of Guinea-ships have informed me, that, in general, the Negresses have larger hips and more capacious pelvises than European women; and, as the heads of adult Negroes are smaller

than those of the Europeans, we may suppose that the heads of their infants are also smaller.”

DISEASES.—On this head we learn that particular diseases attack particular climates and constitutions.

“The African’s MANNER OF WALKING is very different from that of the European’s, and very much resembles that of the ape. This no doubt proceeds from the bones of the leg and thigh being gibbous, from the flatness of the feet, from the height of the calves of the legs, and from the smallness of the gastrocnemii muscles. These circumstances, together with the forward position of the head upon the spine, oblige them, when they walk, to put themselves into such an attitude as will best preserve their balance.

“We have now shewn that there exist material differences in the organization and constitution of various tribes of the human species; and not only so, but that those differences, generally, mark a regular gradation, from the white European down through the human species to the brute creation. From which it appears, that in those particulars wherein mankind excel brutes, the European excels the African.

“It remains yet to notice, that in those particular respects in which the brutes excel mankind, the African excels the European: these are chiefly the senses of SEEING,—HEARING,—and SMELLING;—the faculty of MEMORY,—and the power of MASTICATION.

“SEEING.—Professor Pallas informs us, that ‘Nothing is more astonishing than the acuteness of sight in most of the Calmucks, and the extraordinary distance at which they perceive very minute objects, such as the dust raised by cattle or horses, and this from places very little elevated.’

“Soemmering informs us, that ‘the olfactory and optic nerves, and those of the fifth pair, are uncommonly large in

‘ in the African.’ Neither Calmucks nor Negroes, however, can be compared with hawks, eagles, and some other birds, in acuteness of vision.

“ HEARING.—The *meatus auditorius* is wider in the Negro than in the European. The external ears of Negroes are, notwithstanding, in general, small and round, and have no lobes. This is the case with many monkeys: but the Calmucks have very large ears, which stand out considerably from the head; and the ears of Dr. Tyson’s pigmy were constructed in the same manner. There seem, therefore, to be two different approaches to the brute species in the construction of the external ear.—Professor Pallas says, the Calmucks hear, at a great distance, the trampling of horses, the noise of an enemy, of a flock of sheep, or even of strayed cattle: they have only to stretch themselves on the ground, and to apply their ear close to the turf.—Certain quadrupeds, as hares, horses, asses, and such others as can erect their large ears, are still more perfect in hearing than the Calmucks.

“ SMELLING.—It is observable that Negroes have wider nostrils than Europeans. Pallas informs us, that the nose of a Calmuck is of a structure quite singular, being, generally, flat and broken towards the forehead. They find the subtilty of the sense of smell very useful in their military expeditions; for by it they perceive, at a distance, the smoke of a fire, or the smell of a camp. There are many of them who can tell, by applying the nose to the hole of a fox, or of any other quadruped, whether the animal be in or not. But dogs possess this sense in the greatest perfection.

“ It is said that Negroes excel Europeans in MEMORY; but those domestic animals with which we are best acquainted, as the horse and the dog, excel the human species in this faculty.

“ Negroes have stronger powers of MASTICATION than Europeans: and most quadrupeds have them still stronger.

“ As to the senses in general, so far as relates to the human species, custom and exercise seem to have a considerable effect in improving them; but are not, it may be presumed, sufficient to account for the differences that actually exist.

“ It will not be amiss here to exhibit, in one point of view, the conclusions deducible from the facts and observations stated in the second part of this essay.

“ 1. There are material differences in the corporeal organization of various classes of mankind.

“ 2. Taking the European man as a standard of comparison, on the one hand, and the tribe of simiæ on the other; and comparing the classes of mankind with the standards, and with each other, they may be so arranged as to form a pretty regular gradation, in respect to the differences in the bodily structure and economy, the European standing at the head, as being farthest removed from the brute creation.

“ 3. That the African, more especially in those particulars in which he differs from the European, approaches to the ape.

“ 4. That the following characteristics which distinguish the African from the European, are the same, differing only in degree, which distinguish the ape from the European:

“ IN THE BONY SYSTEM,

“ The narrow and retreating forehead and hind-head.

“ The flat bone of the nose.

“ The great distance betwixt the nose and mouth.

“ The small retreating chin.

“ The facial line.

“ The great distance betwixt the ear and the fore part of the mouth.

“ The

“ The small distance between the *foramen magnum* and the back of the head.

“ The long and strong under jaw.

“ The large bony sockets which contain the eyes, and the wide *meatus auditorius*.

“ The long fore arm.

“ The flat foot; and the length, breadth, shape, and position of the *os calcis*.

“ IN OTHER PARTS OF THE SYSTEM,

“ The broad and flat cartilage of the nose.

“ The small *gastrocnemii*, and large temporal muscles.

“ The long *tendo Achillis*.

“ The thick skin, and short woolly hair.

“ The small brain.

“ The long breasts of the females.

“ The parts of generation.

“ The paucity of different discharges.

“ The rank smell.

“ Their manner of walking.

“ The power of adaptation to a warm climate.

“ Their shorter period of life.

“ 5. That different classes of men are not liable to all the diseases incident to mankind, and that they are infested with different insects.

“ 6. That, in comparing the classes of mankind with each other, and with the brute creation, as in the second article, there is a gradation also discoverable in the senses of *seeing*, *hearing*, and *smelling*, in *memory*, and in the powers of *mastication*; but in a contrary order to that above stated, the European being least perfect, the African more so, and the brutes most perfect of all, in these particulars.”

(To be concluded next month.)

ART. IV. *An Inquiry into the Nature and Origin of Mental Derangement; comprehending a concise System of the Physiology and Pathology of the Human Mind, and a History of the Passions and their Effects.* By ALEXANDER CRICHTON, M. D. Physician to the Westminster Hospital; and Public Lecturer on the Theory and Practice of Physic, and on Chemistry. Octavo. 2 vols. Price 12s. CADELL and DAVIES, London. 1798.

WE feel it our duty to apologize to our readers for having so long delayed to present them with an account of this interesting and valuable work; which contains the result of a laborious and scientific inquiry into the nature and origin of a class of diseases, hitherto very imperfectly investigated by medical writers.

In the prosecution of this inquiry Dr. Crichton has adopted the method of analysis, beginning with the most simple, and gradually proceeding to the more complex objects which present themselves. We shall endeavour to follow him through the whole of his track, pointing out, as we go on, such things as seem to deserve the peculiar attention of the reader, or to require the reconsideration of the writer.

The preface contains a number of preliminary observations, which we do not think it necessary to transcribe. They are, upon the whole, exceedingly judicious, and shew that the author did not attempt to travel through these dreary regions without making due preparations for his journey, and carefully considering the difficulties which were before him.

Dr. Crichton very properly remarks, that he who undertakes to examine mental diseases by analysis, should be well acquainted with the human mind in its sane state. He has therefore availed himself of the assistance of the ablest psychologists, in connexion with his own reflections, to point this
out;

out; considering the several faculties of the mind distinctly, and giving a view of the morbid affections of each, immediately after the description of it, as it appears when unimpaired.—The work is therefore divided into three books. The first treats on irritability, sensation, and delirium; the second on the mental faculties and their diseases; and the third on the passions and their effects. The work is concluded by a nosological arrangement of mental diseases, which we shall transcribe in its place.

The first subject examined is the principle of irritability, and its laws. This principle does not depend on any peculiarity of structure hitherto ascertained. The various hypotheses concerning it are however recited, and particular notice is taken of Dr. Girtanner's suggestion that it is nothing else than oxygen. Dr. Crichton has refuted this whimsical notion with unanswerable arguments, but at much greater length than it deserved. The laws of irritability are summed up in the nine following axioms.

“ I. After every action in an irritable part, a state of rest, or cessation from motion, must take place before the irritable part can be again incited to action.

“ II. Each irritable part has a certain portion or quantity of the principle of irritability, which is natural to it, part of which it loses during action, or from the application of stimuli.

“ III. By a process wholly unknown to us, it regains this lost quantity during its repose, or state of rest.

“ IV. Each irritable part has stimuli which are peculiar to it, and which are intended to support its natural action.

“ V. Each irritable part differs from the rest, in regard to the quantity of irritability which it possesses.

“ VI. All stimuli produce action in proportion to their irritating powers.

“ VII. The action of every stimulus is in an inverse ratio to the frequency of its application.

“ VIII. The more the irritability of a part is accumulated, the more that part is disposed to be acted upon.

“ IX. If the stimuli which keep up the action of any irritable body be withdrawn for too great a length of time, that process on which the formation of the principle depends is gradually diminished, and at last entirely destroyed.”

All these axioms are explained and illustrated by a variety of pertinent observations.

The second chapter is allotted to SENSATION; a term, under which several things are included, which it is necessary to distinguish from each other. These are—1. The change produced in the *nerve* by the application of an external body. This Dr. Crichton has called the *nervous impression*.—2. The change produced in the *brain* by the communication of the nervous impression. This he calls *sensorial impression*.—3. The affection of the mind; which is termed *mental perception*. The author adds, that even “ a mental perception is totally distinct from the consciousness we have of it;” but this last is a distinction in which we confess ourselves unable to follow him. He appears to use the word *consciousness*, in this place, for that which should rather be termed *reminiscence of the mental perception*, and certainly makes no part of sensation.

Nervous impressions are of two kinds, *external* and *internal*; the latter being such as take place at the origin of the nerves, and are, in general, nothing else than the communication of a sensorial impression. “ The brain may be considered as the centre of a great circle, and the remote extremities of the nerves as its circumference. Every impression which proceeds from the circumference to the centre is to be considered as external; and every one, on the contrary, that proceeds from the centre to the circumference, is internal. In this way, one and the same impression may be both external and internal as to its ultimate effects :

effects: for instance, if it be received in a part of any nerve which lies between the centre and the circumference," as in a blow on a certain spot near the elbow, the impression being felt both at the part where the blow is given, and also at the extremity of the little finger; so also in epilepsy arising from worms, &c. in the intestines.

Here the author inquires, "What is the nature of that corporeal change produced in our nerves by the action of an external body, to which the name of nervous impression has been given?" And on this intricate subject he has delivered an hypothesis, which appears extremely probable. He first states the well-known truth, that when one body strikes another with any force, the momentum communicated displaces each from its situation in regard to other bodies surrounding it, and also displaces the particles of each from the situation they were in previous to the moment of concussion.

This displacement of particles is sometimes very transitory. It varies also according to the degree of force with which one body strikes the other, according to the density and elasticity of each, and the arrangement of the surface of the body which strikes.

This displacement he calls *the figure of impression*, or simply, *impression*. The facility with which this change is transmitted through any mass, seems to be in a direct ratio with the repulsive power of its particles, the particles of no substance being in perfect contact:

After these remarks, Dr. C. states the following opinion, which we shall give in his own words:

"The vascularity of the cineritious part of the brain, and of the nerves themselves, their softness; pulpiness; and natural humid appearance, give reason to believe that between the medullary particles of which they are principally composed, a fine fluid is constantly secreted, which may be fitted to receive and transmit, even more readily than other fluids

fluids do, all impressions which are made on it. I do not conceive that there is any necessity for supposing it to be of a supernatural degree of fineness, such as the conjectural æther of authors; nor is it necessary to consider the nerves as tubes in which it circulates. It is a constituent part of their texture, lying between and surrounding the medullary particles. The particles of this fluid, as well as the medullary part of the nerves, must, in common with all matter, have each of them their atmospheres of heat, which probably increases their natural repellent powers. When any of the particles, then, of this fluid are forcibly deranged from their natural situation, those which have been compressed act on those nearest them; and thus the figure of impression is transmitted to the brain, or to other parts of the nervous system. Hence it follows as a necessary deduction, that what we consider to be the properties of external bodies, are, more properly speaking, only alterations of our own nerves. These are caused, indeed, by certain physical properties in the bodies; but our knowledge of these properties is combined with the affection of our nerves. It is on this that is founded, in a great degree, the diversity of tastes, or judgments, which different people entertain about the same external object.

“ As the fluid which conveys the impressions of external bodies to the brain appears to be secreted from the fine vessels which supply the nerves with nourishment, so it necessarily follows that they must be variously affected by every thing which alters the action of these vessels; and hence we find two laws of sensibility very similar to those of irritability:

“ 1. *All stimuli which excite an increase of vascular action increase the sensibility of the nerves, but by doing so, the principle of sensation, as well as the principle of irritability, are gradually exhausted.* A certain quantity of food, wine, heat, and exercise, all render a person more lively, and

more awake to the impressions which are made on his senses; for, by means of these stimuli, the action of the whole arterial system is increased, and, consequently, all secretions go on more rapidly than they did before. The nervous fluid is diffused more copiously between the particles of the medullary substance of the nerves, and from this distention a kind of pleasurable sensation arises, which is felt all over the frame. It is then that we are most disposed for every fine, and are most hurt by every painful feeling. Then, the desires which depend on corporeal sensation are apt to be awakened by the slightest causes, as we are strongly predisposed for every thing which can gratify the senses: but if the same stimuli be too great, the irritability of the body is exhausted; secretion is diminished, the nervous fluid is scantily formed, and we become dull, stupid, and languid. Our eyes do not feel the light, nor our ears the rays of sound; the brain does not receive the impressions of volition, or any of the mental operations, and we fall into a state of torpor, called sleep.

“ 2. *When nervous stimuli are diminished, and arterial action supported at the same time, the nervous fluid is necessarily accumulated, and sensibility thereby increased.*

“ Hence it happens that all our sensations are increased after we have been some time without having had them excited. A person who has been long shut up in the dark, cannot, for some time afterwards, easily bear a moderate light. A person in health, who is prevented from having much intercourse with society, has a high relish for the few gratifications which he can obtain. The taste of wine, and of food, is most enjoyed by him who uses them sparingly. From this it may be easily understood why healthy feelings, and healthy desires, can only be preserved by those who are moderate in their enjoyments.”

Dr. C. has given a summary of the different conjectures which other writers have formed on this subject, but refers

to

to Haller's Physiology for a particular enumeration of them. He examines and refutes Dr. Darwin's supposition of moving fibres in the organs of sensation, and then proceeds to apply the hypothesis we have quoted to the principal phenomena of the external senses.

The third chapter is on SELF-FEELING, the seat of which is in the extremities of all the nerves of the body, *except those* which supply the organs of the five external senses. The Germans call it *Gefühl des wohlseyns*, or the feeling of well-being, or health.—It is certainly a distinct sensation, and well described by Hubner, to whose learned dissertation the author refers.

The fourth chapter treats on corporeal PLEASURE AND PAIN, enumerating the principal phenomena of each, and attempting to explain them in conformity with the principles before laid down. The nerves, like every other part of the human frame, are supplied with arteries and veins; they are consequently subjected to all the diseases which the irregular and inordinate action of these vessels occasions: so that many causes of bodily pain produce their effect by exciting too great an action in these vessels. But the affection of a nerve which occasions the feeling of pain, Dr. C. asserts, is always to be considered as a physical derangement of its structure; which may, however, be either transitory or continued.

“Many circumstances, which produce bodily pain, when they are diminished to a certain degree excite the sensation of bodily pleasure. A moderate degree of heat, and a moderate degree of light, a gentle degree of friction, a cool breeze when the body is warm, all produce a pleasing sensation; but if the light, heat, friction, and cold be intense, the effect is painful, or unpleasant. A dish moderately warmed with spices is pleasurable; a dish in which too much pepper is mixed occasions a burning pain. Since, then, the exciting causes of these two sensations differ from each other in degree only,

it is natural to imagine that the affection of the nerves, which we call pleasure, differs from pain also in degree alone.

“ This idea is corroborated by investigation. All the causes of bodily pleasure and pain are direct stimuli ; such, for instance, as heat, friction, light, well-prepared viands, wines, &c. The first effect which all these naturally produce is, to increase the action of every vessel of the part to which they are applied, and consequently, of those which supply the nerves of the part. This increase of motion, or action, in the vessels of these delicate organs may, according as it is gentle or violent, be the immediate cause of the affections of the nerves, which we call pleasure or pain. The increased action of the blood-vessels of the part may also be productive of other effects, which likewise conspire to the production of pleasure or pain. I have said that a number of circumstances prove to us that there is a peculiar fluid secreted in the nerves. Like all secreted fluids, it must be changed by every alteration in the action of the blood-vessels. If the action be only gently increased it will flow more copiously and easily ; if the action be diminished, it will be slow. In the first case there is an indescribable state of bodily comfort, ease, or pleasure, which seems to pervade the whole frame ; in the latter case there is a degree of nervous uneasiness, which occasions restlessness, and many painful nervous feelings.

“ The causes which produce the feeling of pleasure in our senses are numerous ; they are either repetitions of moderate stimuli, which are of a similar nature, or else a succession of different stimuli, which are applied with a gentle force. The first seldom occasion any exquisite feeling of pleasure, except to certain organs of touch. The latter are common to all the senses, touch excepted. All compound dishes yield, in general, more pleasure to the organs of taste than bread, or water, or any simple sapid body. The smell of one flower may certainly be grateful, but we are more delighted by
fragrant

fragrant odours which come in succession from a number of sweet-scented plants, than by continuing to smell at one alone; a single note of music often repeated is not pleasurable to the ear, but a gradual succession, and a just combination of notes, allied by musical affinities, are agreeable.

“ In regard to the eye, which of all our senses seems to be the most perfect, not only in regard to the fineness of the matter, the impressions of which it feels, but also in regard to the variety of objects, of which it conveys impressions to the mind, its pleasures consist either in certain varieties and associations of colours, or in varieties of figure, or in the variations of the shades of light.”

In the fifth and sixth chapters, the subject of DELIRIUM is taken up, and treated in a masterly manner. The author begins by observing, that all delirious persons have certain diseased perceptions and notions, in the reality of which they firmly believe; and which, consequently, become motives of many actions and expressions which appear unreasonable to the rest of mankind. The expression, *diseased* perceptions, he prefers to *false*, or *erroneous*; because the ideas in all kinds of delirium arise from a diseased state of the brain, or nerves, or both; and because the word *erroneous* does not describe any thing peculiar to delirium; for every man, however sane or wise he may be, has some erroneous notions, in the reality of which he firmly believes, and which often seriously affect his conduct.

The diseased notions, in delirium, are of two kinds; such as are referable to objects of external sense, and such as are referable to the qualities and conditions of persons and things, and the patient's relation to them.

The exciting causes of delirium are, 1. Physical and corporeal causes: 2. Too great, or too long continued exertion of the mental faculties: or, 3. Strong passions. Between these three classes of causes there is no evident analogy:

analogy : Dr. C. therefore proceeds to inquire how it is they agree in producing delirium, and what is that common principle on which they all act, when they give rise to similar diseased phenomena in the bodies and minds of different persons. He first refutes the notion of DUFOURS, who attempted to prove that diseases of the external senses, by giving rise to erroneous perceptions, produce aberration of reason ; whereas it is evident, that in a large majority of cases of this kind, no delirium ensues, without the occurrence of some other cause, which would probably, if not certainly, produce delirium at that time, though the external organs of sense were absolutely unimpaired. To elucidate this subject, Dr. C. traces the progress of delirium in intoxication from powerful stimuli, in which three stages may be remarked.

“ The *first* is that in which the person has several unnatural perceptions, his judgment, however, remaining still entire.—The *second* is a state of perfect delirium, in which he talks and acts unreasonably.—The *third*, a state of coma, or apoplexy.

“ There is a certain point of intoxication when a person sees the lights double, and yet has so much understanding as to know that it is a mere illusion of sight, proceeding from the wine or spirits he has drank. He has erroneous perceptions, and yet is not delirious : nay, it is by no means uncommon to see some young philosophers and students, who are accidentally in this state, making the experiment of first shutting one eye, and then the other, with a view of discovering whether they see right or not. At such a period a person is still capable of conducting himself with tolerable propriety, although he generally loses a little command over the muscles of voluntary action. He gives a distinct and rational answer to any question that is put to him, but it is not always very distinctly pronounced. If more strong liquor be taken, a state of real delirium ensues, in which

which the person talks idly and unreasonably; vociferates loudly; speaks in broken and incoherent language; emits screams and ejaculations; laughs and swears alternately, and has no command over his actions. If the debauch be continued, he at last falls from his chair in a state which is called *dead drunk*, and which is a state of real apoplexy; or if he has not taken so much as to induce this, the delirium terminates spontaneously in a profound and comatose sleep, from which it is almost impossible to awaken him.

“During the whole time that this scene is going on, there is a considerable degree of disorder prevails in the heart and arteries, in which, indeed, the cause of the delirium has generally been sought for; the circulation is much quicker, and stronger than usual; the pulse rises both in force and velocity; the heat of the skin is increased; the face glows; the eyes become red and suffused; and a great determination of blood to the head evidently takes place.

“It is well known that in many febrile diseases, which are accompanied with strong arterial action, as in pneumonia, acute rheumatism, phrenitis idiopathica, and measles, a delirium now and then occurs. This delirium is always attended by a number of symptoms, which are analogous to those that arise in the delirium of drunkenness; such as a quick and strong vibrating pulse, increased heat of skin, thirst, and restlessness; a hot and glowing countenance, eyes vivid, sparkling, and sub-inflamed; and all the marks of great determination of the blood to the head. In this delirium the person exhibits signs of uncommon muscular strength, and is agitated by violent passions; he requires the force of some men to keep him quiet, and his language is generally injurious, and expressive of pain, hatred, or anger.

“One would be induced to conclude from all these observations, that a preternatural determination of blood to the head was sufficient to produce delirium; and, therefore,
that

that this might be considered as one of the more immediate causes of this disordered state of mind; but a little reflection soon forces us to a deeper research. If a mere increase of circulation of the blood, through the vessels of the head, be a cause of delirium, it ought to arise whenever that occurs: but this we know is not always the case; for a person shall have the blood preternaturally determined to the head by various kinds of exercise, and his pulse beating 120 in a minute, and yet shall have an understanding as clear and unclouded as when his pulse was at its natural standard. Besides, there are many instances of people labouring under acute rheumatism, and pneumonia, whose pulse beats 120 in a minute for several days, and yet have no delirium. From which it is evident, that something else than mere increased determination of blood to the head, and quickness of circulation, is necessary to account for the production of the disease."

From these circumstances, and from an accurate delineation of the attack and advances of frenzy; and the appearances, or rather the want of regular appearances, explanatory of the disease, which is found on dissection; Dr. Crichton is led to conclude, that the principal cause of frenzy and deliria must be a peculiar morbid action of the vessels which secrete nervous matter and the fluid which is formed in the medullary substance of the nerves. This idea is pursued at some length, and applied with great acuteness, to explain the different kinds of delirium in various species of insanity.

"The unusual hardness, specific gravity, dryness, and toughness of the brain, and the various tumors, corrosions, enlargements of particular parts, ossifications, and the adhesions of the membranes, &c. are often the consequence of the morbid action of insanity; but while they are thus to be considered as mere effects, they are also to be looked

on as causes, which, by constant irritation, predispose the vessels of the brain to the renewal of the delirium.

“ Another class of causes, which greatly predispose a person to disorders of the mind, are various kinds of debility, such, for instance, as arise from poor diet, bad drink, scrophula, over-fatigue of body, excess of venery, self-pollution, excessive hæmorrhages, and excessive discharges.

“ The exciting causes of the various deliria which are considered as cases of insanity are very numerous. They are either,

“ I. *Powerful Stimuli.*

“ A. Excessive heat, especially the too long continued action of the rays of the sun on the head.

“ B. Immoderate exercise, especially in hot weather.

“ C. Sudden transitions from cold to heat, by which the irritability of the vessels of the brain, like those of the whole body, is first accumulated, and then violently excited.

“ D. Sudden transitions from heat to cold, by which a preternatural quantity of blood is thrown into the head, and acts as a violent mechanical stimulus.

“ E. Over-exercise of the mental faculties.

“ F. The passions, when violent.

“ G. Powerful stimuli applied to the stomach, such as

“ 1. Wine, spirits, and all strong liquors.

“ 2. Opium, and other powerful narcotics, as they are commonly called.

“ 3. Cantharides, and other aphrodisiacs.

“ H. The translation of various inflammations, and other diseased actions, to the brain, particularly those which constitute and accompany cutaneous disorders.

“ II. *Diseased nervous Impressions, conveyed from distant Parts of the System to the Brain.*

“ These diseased nervous impressions may either be diseased

diseased actions of the parts themselves, or they may arise from irritating bodies applied to them.

“ It is impossible to reduce these under the form of a table; for, in fact, they may occur in any part of our frame. A delirium similar to lunacy has been known to arise from a sprain, from a fractured bone, from a bullet having been lodged among the external muscles of the body; as well as from worms in the intestines, from ulcers in the uterus, and from various diseases of the viscera of the abdomen.

“ The first class of causes may be considered as being more particularly the exciting causes of pure insanity.

“ The second class of causes, especially those arising from diseases in the stomach and intestines, give rise to the temporary delusions which are peculiar to hypochondriacs.”

The history of the Proteus hypochondriasis is very faithfully detailed, and some striking instances of its miserable influence are quoted from various writers.

“ It appears that the principal seat of the predisposition to hypochondriasis is to be sought for, not only in weak organs of digestion, but also in a preternatural nervous sensibility; for we often meet with cases of dyspepsia, and disordered stomach and bowels, which have continued with a patient for many years, and yet no real hypochondriasis follows. I know several people who have laboured upwards of twenty years under stomachic complaints of various kinds, and who, notwithstanding, have never had any hypochondriacal symptoms.

“ These facts give rise to the conjecture that there must be other diseased actions going forward in hypochondriacs, than those which occur in the viscera of the abdomen; and this conjecture is confirmed by a great number of phenomena which are constantly to be observed in such people. They have many painful feelings in parts where no disease

apparently exists, and they have many diseased perceptions which command their belief, and greatly add to the general sum of their misery.

“ A number of the most distressing feelings which hypochondriacs often complain of, are external pains, seated immediately under the skin, and in parts which, when examined, appear to be in a sound state. Sometimes the pain is in the middle of one or two of the ribs, sometimes in the middle of the leg, thigh, or arm, sometimes in the back, and also in various parts of the head.

“ These painful feelings are generally transmitted from impressions in the stomach and intestines. But their being transmitted in such an unnatural way proves a very disordered state of the nerves.—

“ Although hypochondriasis may be justly said to arise from a disordered state of the viscera of the abdomen, yet it is also often brought on by affections of the mind, such as deep and long-continued grief and melancholy. These mental affections produce hypochondriasis, by creating a disorder in the stomach and intestines, and in the nervous system ; so that in every instance it arises, either directly or indirectly, from this source. But as all impressions which arise from the viscera of the abdomen are naturally obscure, we see the reason why these must continue for a great length of time, or be often repeated before they can withdraw a person's attention from the ordinary impressions of external objects, which are clear and distinct, and before they acquire such a degree of vividness as to destroy the operations of reason.”

In our next number we shall pursue the remaining subject of these volumes. Its great difficulty and importance demand that it should not be hastily passed over, and must plead our excuse for the length to which this analysis will probably extend.

O.

ART.

ART. V. *A Treatise on Bilious Diseases, and Indigestion; with the Effects of Quassy and Natron in these Disorders.* By JOHN GIBSON, M. D. a Surgeon in the Royal Navy, and in the Practice of Surgery, &c. London. Octavo. pp. 68. MURRAY and HIGHLEY, London. 1799. Price 2s.

IN the diseases on which Dr. Gibson treats, he recommends, as a general practice, the exhibition, first, of a calomel purge, and then, of an infusion of quassia, with natron. The formula he prefers is this: Take a dram and an half of the quassia wood, with two drams and an half of Sal sodæ, and infuse them one hour in a quart of boiling water: two ounces of this infusion are to be taken twice, or oftener, in the day; with the addition of an aromatic, or any other medicine, which the state of the patient may require. Several cases are given to prove the efficacy of this practice; and some useful observations, on the treatment of intermittents with small doses of ipecacuanha, are likewise introduced. S.

ART. VI. *Philosophical Transactions of the Royal Society of London: for the Year 1799. Part I.* Quarto. pp. 182. ELMSLY, London. Price 8s. 6d.

THIS part of the Transactions of the Royal Society contains nine papers; but the only articles we deem it necessary to take notice of are, the 1st, the 4th, the 5th, and the 6th. I. *The Croonian Lecture. Experiments and Observations on the Structure of Nerves.* By EVERARD HOME, Esq. F.R.S.

The novelty and ingenuity which are displayed in this paper, entitle it to particular attention. The usual subject of the Croonian lecture is MUSCULAR MOTION; but having had the honour of laying before the Royal Society several

lectures on the actions of different parts of the organ of vision, the prosecution of the same inquiry has led Mr. Home to offer the following observations on the internal structure of the optic nerve.

“ On the first view, the structure of nerves may appear an improper subject; but, when their offices and connexion with muscles are maturely considered, any knowledge respecting them will be allowed an important acquisition towards the investigation of muscular motion.

“ In bringing forwards an account of newly-acquired facts, the most natural, and therefore the most satisfactory method is, to begin with the circumstances which led to their detection. This at present becomes the more proper, as the experiments which brought the subject of nervous structure under consideration, were made upon the eye, and were in some measure connected with the observations contained in the former lectures; they were instituted with a view to ascertain the cause of the luminous appearance frequently observed in the cat’s eye.

“ The illumination so conspicuous in the eye of the cat, and of many other animals, when seen in an obscure light, has attracted the attention of every common observer. Philosophers also have paid particular attention to it, and have endeavoured to investigate the cause. On this subject there have been two opinions; one, that the illumination arises from the external light collected in the eye, and reflected; the other, that there is a quantity of light generated in the organ itself.

“ Professor Bohn, at Leipsick, made experiments which proved, that when the external light is wholly excluded, none can be seen in the cat’s eye.

“ These experiments were favourable to the first opinion; but the brightness of the illumination is so great, that it appeared to exceed any effect which could be produced through the medium of the retina; so that some other

source of light was thought necessary to account for the phenomenon: this circumstance gave support to the second opinion.

“ To determine which of the two opinions was just, several experiments were instituted, under the direction of Mr. Ramsden, who likewise assisted in making them. The truth of Professor Bohn’s experiments was readily ascertained; it therefore only became necessary to inquire whether the external light was of itself capable of producing so great a degree of illumination, as that seen in the cat’s eye.

“ This was attended with difficulty; for, when the apartment in which the experiments were made was so much darkened, that nothing but the illumination from the eye was visible, the animal, by change of posture, or some other means, almost immediately deprived the observers of all light from that source. This was found to be the case, whether the cat, the tiger, or the hyena was the subject of the experiment. On the other hand, when the light in the room was sufficient for the animal itself to be seen, the illumination in the eye was more obscure, and appeared to arise from the external surface of the iris.

“ As the difficulties which occurred in making observations on the illuminated state of the eye in the living animal were so great, an attempt was made to repeat as nearly as possible the experiment after death.

“ In doing so, it was found that a strong light thrown upon the cornea illuminated the iris, as it had done in the living eye; but when the cornea was removed this illumination disappeared. The iris was then dissected off, and the lucid tapetum completely exposed to view; the reflection from which was extremely bright, the retina proving no obstruction to the rays of light, but appearing equally transparent with the vitreous humour and crystalline lens.

“ From these experiments it appeared evident, that no light is generated in the eye: the illumination being wholly

produced by the concave bright-coloured surface of the tapetum, collecting the rays of the external light, concentrated by the cornea and crystalline lens, and reflecting them through the pupil. When the iris is completely open the degree of brilliancy is the greatest; but, when the iris is partly contracted, which it always is when the external light is increased, then the illumination is more obscure, and appears to come from the iris; a part of the light reflected from the tapetum being thrown back by the concave surface of the cornea upon the anterior surface of the iris, giving it a bright shining appearance.

“ The influence which the will of the animal has over this luminous appearance seems altogether to depend on the contraction and relaxation of the iris. When the animal is alarmed, or first disturbed, it naturally dilates the pupil, and the eye glares; when it is appeased, or composed, the pupil contracts, and the light in the eye is no longer seen.

“ The most material information that has been gained in this investigation is, the transparent state of the retina in the eye during life; the opaque membranous appearance which it puts on in the dead body not being natural to it, but a change which takes place in consequence of death. This fact is almost all that is necessary to explain the luminous appearance in the eyes of cats.

“ That neither Baron Haller, nor Fontana, had an adequate idea of the transparency of the retina, will appear from the following expressions respecting it, taken from their works:

“ Haller describes it in the following words; ‘ Mem-
 ‘ branam crassam quidem, sed mollissimam, pellucidam
 ‘ utique, quando recens oculus inspicitur, ut per eam sub
 ‘ aquis choroideam videas; tamen ex flavo subcineream*.’
 So that although he calls it transparent, he says it is of a yellowish ash-colour.

* *Elementa Physiologiæ*, tom. v. p. 385.

“ Fontana’s

“ Fontana’s expressions are, ‘ Cette insensibilité de la retine à la lumiere, en tant que lumiere, derive-t-elle de ce que les nerfs sont encore trop gros, et ne sont pas bien decouverts des tissus cellulaires? ou de ce que la pulpe de la retine est trop amoncelé, et empêche les rayons de lumiere d’arriver jusqu’à ces mêmes nerfs †?’

“ In considering the use of the lucid tapetum, it was an idea of the late Mr. Hunter that the retina received a double stroke from the rays of light which entered the eye; one, in passing to the tapetum; the other, in returning from it.

“ This very ingenious opinion had some difficulties opposed to it, while the retina was supposed capable of obstructing the rays of light even in the smallest degree, as they could not be equally transmitted, so as to affect every part of the membrane alike. But the retina being ascertained to be absolutely transparent, these objections are entirely removed, and there can be no doubt that the rays of light, in those eyes which have a lucid tapetum, must remain upon the retina as long again as in the eyes of other animals; since the time required to strike upon the tapetum and return, must be twice as much as is necessary for passing through the retina, to reach the nigrum pigmentum, where they are lost.

“ This may appear to be a consideration of little consequence, as the velocity of light is so great, and the continuance of impression necessary for distinct vision is that produced by a successive flow of similar rays of light from the object; it may, however, be all that is necessary for the purpose.

“ The retina being found perfectly transparent when the eye is examined in a recent state, led to the idea that the internal structure of the optic nerve, when examined in the

† Sur le Venin de la Vipere, vol. ii. p. 219.

same state, might also be transparent. To ascertain this point the following experiment was made:

“ The posterior half of a cat’s eye, while in a very recent state, was immersed in a basin of water, and examined. The tapetum appeared very bright, the retina not having acquired sufficient opacity to become visible; the entrance of the optic nerve was a very white spot, which seemed to be opaque; but, when small pieces of coloured paper were alternately placed between the outside of the eye and the bottom of the basin, their colour was distinctly seen in the cavity of the eye, through the substance of the optic nerves; so that at this part the internal structure of the nerve has a degree of transparency.

“ This appeared to be a newly discovered fact: and to ascertain whether it was really so, the works of several physiological writers were consulted, but nothing was found which gave an idea that their authors had the smallest knowledge of it.

“ This semi-transparent state of the internal parts of the optic nerve, while recent, led naturally to the examination of its substance, by means of magnifying glasses; and, notwithstanding the failure of so many men of superior abilities in this intricate inquiry, it held out the hope of meeting with some success.

“ The principal theories which have been formed respecting the structure of nerves have been taken notice of by Fontana: as they all differ from the observations which will be stated in the present paper, it may not be improper to mention the heads of each of them, so as to bring into one point of view all the knowledge that has been acquired on the subject.

“ Torre found the medullary substance of the brain, spinal marrow, and nerves, to be a mass of transparent globules, swimming in a transparent fluid. When the parts were magnified one thousand times, the globules appeared

appeared largest in the brain, and smaller in the spinal marrow; they had no regular order; but, in the nerves, the globules were placed in lines, so as to give the appearance of fibres. In examining the optic nerve, the parts were magnified one hundred and twenty times.

“ Prochaska considered the nerves to be composed of globules, united by a transparent, elastic, cellular membrane, and disposed in straight lines, resembling fibres.

“ Fontana found the primitive structure of nerves to consist of transparent cylinders, which, when united, formed the nerve; the manner of their being disposed is not mentioned. The objects were magnified seven hundred times, to shew this appearance.

“ Dr. Monro considered the nerves as made up of spiral fibres; but afterwards found that what he had described was entirely an optical deception. In his last work he says, ‘ The optic nerves have, in their whole course, less appearance of a fibrous structure than perhaps any other pair of nerves in the human body.’

“ Other authors may have written upon this subject, and may have made observations upon the structure of nerves; but want of leisure must be an excuse for my not having come to a knowledge of them.

“ It is scarcely necessary to mention, that parts of an animal body are not fitted for being examined by glasses of a great magnifying power; and, wherever they are shewn one hundred times larger than their natural size, no dependance can be placed upon their appearance.

“ In making the following microscopical experiments on the internal structure of the optic nerve, great care was taken to avoid the errors of former inquirers. The microscope used was a single one; the focal length of the lens was about $\frac{3.5}{106}$ of an inch, so that the object was magnified about twenty-three times; and, that the results of the experiments might be as free from optical deception as the present

present state of our knowledge in this branch of science will admit, no appearance is described which Mr. Ramsden was not satisfied of having distinctly seen.

“The experiments performed with the single microscope were repeated with a double one, made by Mr. Ramsden, which magnified the object about forty times; but, in the double microscope, the appearances were indistinct, the reflection from the different glasses having thrown a confused glare upon the moist surface of the nerve. This circumstance led Mr. Ramsden to object to the use of compound microscopes, and to consider them as unfit for viewing objects of this kind.

“For the following reasons, the optic nerve of the horse was selected, as the most proper for the experiments. It is of a large size, and several inches in length. It is readily procured in a recent state, as there are places in London where horses are allowed to be killed, and regular days in the week are fixed for that purpose.

“That the examination of the nerve might be made as soon as possible after the animal's death, permission was procured from the man who superintends the killing of horses, to allow Mr. Clift to make the necessary experiments on the spot, the moment the horses were killed. Mr. Clift is the person intrusted with the care of keeping in order the late Mr. Hunter's collection in comparative anatomy, and is well qualified, from his anatomical knowledge, and a familiarity in looking at organized parts through magnifying glasses, for an examination of this kind. These experiments were afterwards repeated by Mr. Ramsden and myself. From this mode of conducting them, the chances of error were few; since the person who first observed the appearance had no previous opinions on the subject; and Mr. Ramsden was better able than any other person to correct such optical errors as might deceive Mr. Clift, or myself.

“The first experiments were made upon transverse sections

tions of the nerve. One, near its termination in the eye, was placed upon glass, and exhibited in the microscope the following appearances: it was evidently composed of two parts, one opaque, the other transparent. The opaque portions were nearly circular in their shape, about 600 in number, and touched one another; the interstices between them were transparent.

“ When the opaque parts were attentively examined in a favourable light, and the nerve was in a recent state, they were found to be made up of a great number of smaller portions, each of which appeared to be also opaque. To see this subdivision of parts required some attention, and in many sections it could not be perceived. The cause of the difficulty seemed to be, the softness and tenacity of the substance divided, which therefore spread itself over the surface, giving it an uniform appearance; but, towards the circumference of the nerve, where the parts were cut obliquely, and some of them torn, the subdivision was very distinct. It was first observed by Mr. Clift, in several different sections; and was afterwards seen very distinctly, both by Mr. Ramsden and myself, in a nerve examined about two hours after death.

“ Having repeated these experiments six or seven times, on different days, so as to ascertain the accuracy of the results, the next object was, to determine whether the nerve had the same structure in its whole course. For this purpose, transverse sections were examined in different parts of the nerve, near the brain, towards the middle, and nearer the eye; of these experiments the following are the results: in all the sections the nerve appeared to be made up of the same substances; but the size and number of the opaque parts differed very much. They have been stated, near the eye, to be 600; about the middle of the nerve, they were 150; and near the brain, between the origin and union of the two nerves, they were only about 40. As they became
larger

larger they were less regular in their shape, and had less of a circular form; nor were they uniform, some appearing very large, with one or two smaller placed between them.

“ After having succeeded in this examination of the nerve transversely, an attempt was made to investigate its structure in a longitudinal direction. To do this, a portion of the nervous pulp had its coat, formed by the dura mater, along with a thin vascular membrane which lines it, carefully removed for about an inch in length; the external surface of the pulp was then examined with a magnifying glass; the structure was evidently fasciculated, but the fasciculi did not run parallel to one another; they seemed to unite together and separate again, in such a manner, that any one of them could not be traced for half an inch in length, without being lost in the neighbouring part. When their sections were examined in the field of the microscope they put on the same appearance; this was equally the case, whether the part examined was near the centre or circumference of the nerve. The fasciculi were largest in that part of the nerve near the brain, and smallest towards the eye. Great pains were taken to ascertain whether the fasciculi were made up of continued fibres, or of small parts unconnected, which, from their position, gave that appearance; but every observation that was made was in proof of their being continued fibres.

“ From these experiments, the internal structure of the optic nerve appears to be made up in the following manner:

“ At its origin from the brain, it consists of thirty or forty fasciculi, or bundles of extremely small opaque pulpy fibres, the interstices between which are filled with a transparent jelly. As the nerve goes farther from the brain, the fasciculi form smaller ones, of different sizes. This is not done by a regular subdivision, but by a few fibres going off laterally from several large fasciculi, and being united, forming a smaller one: some of the fasciculi

so formed, which are very small, unite again into one. In this way, the fasciculi gradually diminish in size, and increase in number, till they terminate in the retina.

“ Near the eye, where the fasciculi are most numerous, the substance of the nerve has a considerable degree of transparency, from the number of transparent interstices between them ; but this is less the case nearer the brain, where the interstices are fewer.

“ In the optic nerve of the cat the structure is the same as in the horse ; but, from the smallness of the parts, less fitted for investigation. Near the eye its internal substance is more transparent than the corresponding part in the horse.

“ To see how far this structure was peculiar to the optic nerve, similar experiments were made upon the internal substance of the fifth and seventh pair of nerves, near their origin at the brain, and the structure was found to be the same. In these last mentioned nerves the interstices between the fasciculi were smaller than in the optic nerve, rendering their transverse sections less transparent ; from which it is natural to suppose, that the internal parts of the optic nerve are not so compact as in other nerves, and therefore it is better fitted for examination.

“ These experiments shew that the nerves do not consist of tubes conveying a fluid, but of fibres of a peculiar kind, different from every thing else in the body with which we are acquainted. The course of these fibres is very curious ; they appear to be constantly passing from one fasciculus to another, so as to connect all the different fasciculi together by a mixture of fibres. This is different from the course of blood-vessels, lymphatics, or muscular fibres : the only thing similar to it, is in the formation of nervous plexuses ; which leads to the idea of its answering an essential purpose, respecting the functions of the nerves.” Y.

(To be concluded in October.)

ART.

ART. VII. *A Series of Engravings, accompanied with Explanations, which are intended to illustrate the morbid Anatomy of some of the most important Parts of the human Body. Fasciculus II. Comprehending the chief morbid Appearances of the Lungs, and of the Parts intimately connected with them.* By MATTHEW BAILLIE, M. D. F. R. S. L. & E. Fellow of the Royal College of Physicians, and Physician to St. George's Hospital. JOHNSON, London. 1799. Large quarto. Price 12s.

OF the present Fasciculus, containing six plates, we need only say that it is in no respect inferior to the former.

Our readers will remember we gave an account of the plan of this work in March. (See Vol. i. p. 52.) X.

MEDICAL REPORTS AND CORRESPONDENCE.

Art. I. *A curious Case of Syphilis, unsuccessfully treated with the nitrous Acid.* Communicated by Mr. KERRISON.

To the Society of Physicians and Surgeons.

GENTLEMEN,

FROM the satisfaction afforded me by the perusal of the London Medical Review and Magazine, the impartiality of its criticisms, and the variety of its contents, I am induced to believe that the following case of syphilis, which had remained several years latent in the system, and had been at no time preceded by primary local affection, will not be unacceptable.

The facts, which occurred within my own knowledge, are warranted; and, as far as reliance may be placed on the affirmation of respectable persons, who have no view to answer by concealment of the truth, and whose veracity can scarcely be doubted, I am inclined to have implicit confidence in them.

In

In the subsequent pages, I shall confine myself to a plain narration of circumstances, without adverting to any hypothesis, or endeavouring to assign the rationale of the action of medicines,—being well aware of its specious delusion: such were the affections; such was the successful treatment. “*Magna est veritas, et prævalebit.*”

I am, Gentlemen, with respect for yourselves and good wishes for the success of your work,

Saville Row,
23^d July, 1799.

Your obedient Servant,
ROBERT KERRISON.

ABOUT six years ago, a married gentleman accidentally contracted several chancres, which were succeeded by a bubo and other signs of venereal infection: these, I am informed, were totally removed by various remedies adapted to each particular affection, under the direction of an able practitioner.

Some months afterwards, his lady was delivered of a male infant, which bore indubitable marks of syphilis, such as universal emaciation, with dark-coloured spots: these degenerated into ulcers, and he survived only a few weeks. During this time the mother had neither apparent nor presumptive affection: no antisyphilitic remedies were administered; no suspicion was then entertained that she was contaminated.

After an interval of five years, in which there had been no subsequent pregnancy nor acquired disease, she was attacked with soreness in the throat, followed by ulceration of the fauces and uvula; for which she was attended by a reputable physician in a sister kingdom, who, it seems, formed an accurate judgment of her case, but, unfortunately, had recourse to a system of cure totally inadequate to arrest the progress of similar complaints,—the use of the nitrous acid in syrup, &c. During the administration of this remedy, which was continued for some weeks, the

ulcers

ulcers increased to an alarming degree, so as to render deglutition and articulation extremely difficult. At this time it was considered expedient to visit London, in order to be under the immediate care of Dr. Rowley and myself; the journey was therefore undertaken, and, on her arrival, the following appearances presented themselves:

1. Several ulcers in the fauces, and a large one covering the base of the uvula, the body of which had fallen off during the journey, whilst under a course of nitrous acid.

2. Several incipient ulcers in the palate, exactly on the symphysis of the *ossa palati*.

3. Pain in the superior and interior part of the nose, chiefly about the *ossa turbinata*.

4. Total loss of smell.

5. Pain, with difficulty of deglutition, and imperfect articulation of speech.

6. Quick small pulse, loss of appetite, and debility.

To remove these symptoms, and check the progress of the disease, the following method was instituted.

After the operation of a mild laxative, the solution as under:

R Hydrarg. muriati—Antimonii tart. āā gr j. Solve in Aquæ rosæ ℥ss. Fiat solutio.

R Hujus solutionis ℥ss, Tinct. cardam. compositæ ℥j, Aquæ puræ ℥j, Syrupi simp. ℥ss. Fiat haustus ter quotidie sumendus.

The Gargle.

R Mellis rosæ—Tincturæ myrrhæ, āā ℥ss, Aquæ rosæ ℥iij. M. f. gargarisma sæpè utendum.

The mouth and fauces were fumigated twice a day with two drachms of hydrarg. sulphurat. ruber (cinnabar), put on an iron nearly red-hot, and covered with a plate-iron conical funnel, curved at the top. The fumes were received into the mouth by a quill adapted to the funnel, retained

for a few moments, and exhaled through the nostrils. This was continued so long as the heat dissipated any fumes. After persisting in the use of the draughts for a week, an addition of one grain of hydr. muriat. and antim. tart. was made to the solution, and continued a week longer; the following draught was then substituted in place of the former:

℞ Hydrarg. purificati ʒj, Gummi Arab. pulv. ʒß, Syrupi simplicis quantitatem sufficientem ut fiat mucilago: contere optime donec globuli penitus evanescerint, cui adde gradatim Aquæ distillatæ ʒxiij.

℞ Hujus misturæ ʒjß, Tincturæ cardamomi compositæ ʒj. F. haustus ter quotidie sumendus.

The fumigations were continued night and morning; the ulcers on the palate were touched with a hair pencil dipped in the following lotion, before each fumigation:

℞ Hydrarg. muriat. gr ij. Solve in Aquæ rosæ ʒß. Fiat lotio.

A tea-cupful of decoct. sarsaparillæ was taken, twice or three times, urgente siti.

By these means the ulcers gradually mended, the sense of smell returned, no ptyalism appeared, the patient walked about in warm rooms; and, having every advantage of diet, as well as domestic attention, joined to an uniform compliance with every necessary particular, neither diarrhœa nor any unpleasant symptoms occurred, which might have impeded the administration of the remedies. In about a month from the beginning, when every thing was in a state of progressive success, a drachm of ung. hydr. fort. was rubbed in every second night; continuing the draughts, decoctions, and fumigations, as before. An increased excretion from the salivary glands was induced, so as to wet from two to four handkerchiefs in a day; the mouth tender, but not very sore; the teeth firm, and not discoloured. This was kept up for about a fortnight, the

fumigations, &c. regularly continued; no diarrhœa came on, no pain, no additional confinement.

At the expiration of seven weeks from the beginning, the ulcers on the fauces, uvula, and palate, were quite healed; the ointment was discontinued, the fumigation repeated once a day, the draughts and decoction of sarsaparilla taken as usual. This plan was persisted in for a fortnight, gradually diminishing the number of draughts and fumigations: the general health was now returning, the appetite better, the mouth and fauces had an appearance perfectly natural, except the loss of the uvula, which had fallen off before her arrival in London.

Twenty grains of pulvis cinchonæ, with five of pulvis aromaticus, were taken three times a day in a little water, and continued for a few weeks: every natural function resumed its former appearance. It is now more than three months since every symptom disappeared, and she remains perfectly well.

Thus was an inveterate disease most completely subdued, during the inclemency of a severe winter, by a persistence in the above mild methods of exhibiting mercurials, without one hour's confinement to a particular apartment, or absence from the company of visiting friends; and a life preserved, which would indisputably have fallen a victim to misplaced confidence in the use of the *nitrous acid*!!

Art. 2. Case of a very large biliary Concretion, voided by the Anus. Communicated to the Society by Mr. WOOLLETT, Surgeon, of Monmouth.

GENTLEMEN,

IF you think the following case deserves a place in your Medical Review, I have Mr. Poule's permission to make it public, and will very readily give you any further intelli-

gence you think necessary to make it acceptable to your readers.

I am, Gentlemen,

Monmouth, Your obedient humble Servant,

13th August, 1799.

J. S. WOOLLETT.

MR. Poule, a very respectable farmer, five miles from Monmouth, about forty years of age, tall and muscular, has been subject to bilious attacks near twenty years past. It is six years since I attended him, and in that period he has frequently complained to me of pain and great uneasiness on pressure of the liver, and has experienced some severe attacks, which clearly demonstrated the existence of bilious calculi. I was called to him the middle of April last. He then suffered from an unusual fulness in the right hypochondrium, great lassitude, and disposition to fever. I recommended exercise on horseback, and gave him the following R Pilul. ex aloë cum Myrrh. Sapo. Venet. āā ðij, Calomel. gr̄ vj. F. pil. N̄ xvj, sumend. iv mane et vesp. R Kali pp. ʒj, Succ. limon. q. s. Aq. menthæ ʒvj, Spir. æther. nitros. ʒiij. M. f. mist. Cochlear. iv larg. bis terve de die sumendus. He continued these medicines near a week; they purged him considerably, and his stools had the appearance of the spawn of frogs. Though he soon was relieved from the fulness which was so very troublesome to him, he yet suffered greatly from a sense of heat, with frequent violent spasms about the scrobiculus cordis, and continual pain under the scapulæ, insomuch that, to use his own expression, “it was sufficient to kill a horse.” On the 21st following, when at stool, he felt a most excruciating pain at the anus from a hard substance which he could not expel, and which obliged him to call for assistance.

The stone, of which I have sent you a sketch *, was taken

* This concretion was of an oblong form, somewhat resembling a kidney; its smallest circumference being three inches and four tenths, and its longest circumference five inches and two thirds.

from him : it weighed the day following seventeen scruples and eight grains. I believe biliary concretions are very seldom of the magnitude of which this case is an example ; neither do I recollect to have read or heard of the expulsion of so large a gall-stone from the living, or indeed found in the dead, subject. Mr. P. complained only of weakness for a few days after, and has continued well since.

Art. 3. *Case of Flooding, owing to the Placenta being placed over the Os Uteri.* Communicated to the Society by Mr. GRIFFITH ROWLANDS, Member of the Corporation of Surgeons, London ; Surgeon to the Infirmary and to the Lying-in Charity, at Chester.

GENTLEMEN,

EARLY in the month of April 1796, I was desired to call on Mrs. M. of this city, who, without pain, had been suddenly seized with a violent flooding ; but which, before I arrived, had so materially abated that I did not think it necessary to make any examination. Her pulse was strong, rather quick, and full. I could not prevail upon her to be bled ; but she was kept quiet, and her diet was directed to consist of such things as were cooling, and most adapted to lessen the impetus of the blood ; and cool air was freely admitted into the room. In a fortnight after the first discharge, a large coagulum came away from the os uteri, and along with it a violent flow of blood ; which, as before, by placing the body in an horizontal position, by free admission of external air, and a perfect state of quiet, was in less than an hour nearly suppressed. She had four or five returns of the hæmorrhage in this manner before she arrived at her full time, and was always aware of the approach of the discharge from a sense of weight, or almost pain, around the abdomen, and especially in the region of the uterus.

uterus. Her pulse at this time was always full and strong, but she could not conquer her fear of letting blood.

On Monday the 21st of June, at one in the morning, she was taken in labour. With the second or third pain the coagulum came away, and with it an alarming discharge of blood. On passing the finger into the vagina, I felt the os uteri considerably dilated, and the placenta presenting. This being the first child, and the os externum uncommonly contracted, I found it impossible to pass my hand into the vagina, though I was sensible the dilatation of the os uteri could have been easily accomplished. My patient was so much reduced in a short time, that her pulse could not be felt, nor was she able to speak so as to be understood, and her pains entirely ceased. I was obliged at this time to give her gruel with wine, also wine alone, to save her from immediate death; and it was with much difficulty that any could be swallowed. Though the discharge at this time was trifling, still I feared there was such an oozing as would deprive her of the little living power that remained. In this state of faintness I made another attempt to pass my hand into the vagina, but in vain. Being determined to put off the fatal moment as long as possible,—her death appearing to me inevitable—I took a double cloth, and, closing the labia, made a pressure with it in such a manner that, on examining it two hours afterwards, there was scarcely a stain of blood upon it. This being continued, and my patient being able to take more nourishment, she was in the course of eight hours considerably recovered, and presently sunk into a sound sleep for *four* hours. On her waking she was much warmer, and her pulse perceptible; but her countenance was still ghastly. About seven o'clock in the evening she began to be uneasy, and in a few minutes had a strong labour pain, accompanied with a profuse discharge of blood. I instantly endeavoured to pass my hand, in the hopes of turning the

child, but was again foiled by the smallness of the os externum. I now forced my finger through the placenta, and found the child's head presenting. I dilated the opening as much as possible, and by the head pressing in forcibly the hæmorrhage was entirely stopped; and, after five hours remarkably hard labour, she was delivered of a dead child: the placenta, being wholly detached, immediately followed.

Remarks. It is observed by Mr. Rigby of Norwich, in his excellent Essay on Uterine Hæmorrhage, that cases of the placenta presenting occur more frequently than most practitioners are aware of; and the mode of relief is ably described. Giffard, also, who practised midwifery very extensively in London, is of the same opinion, and has given the histories of several cases that occurred to him, where, by the timely introduction of the hand, the children were turned and extracted, and the lives of their mothers saved. I believe there is not on record a case where, in addition to the unfortunate circumstance of the placenta being placed over the os uteri, there was so great a constriction of the os externum as not to admit the hand. The event of this case, however, shews it is not altogether out of the reach of help; and should I be so unfortunate as to meet with the like again, I would certainly pursue the same plan of preventing the flow of the blood from the uterus by external pressure * on the labia pudendi, as I have already described. When the os uteri became sufficiently dilated, I would use every means to perforate the placenta, and to make as large an opening through it as possible. I would then continue the pressure as long as there was hæmorrhage, and trust to nature to expel the child. Cordials in these cases must be sparingly given; and not at all, unless

* I prefer this method to Leroux's, which is to fill the vagina with lint, flour, &c. much time being lost in removing these things, when it may be necessary to examine the state of the parts.

there be danger of the patient suddenly sinking. Free admission of cool air, keeping the body cool, giving frequently small acidulous drinks, removing the coagulated blood and wet cloths, and applying others, either dry or moistened with vinegar, are necessary attentions to patients in this low and sinking state.

P. S. I have a plate engraving of a retractor and saw, made by my direction by Mr. Savigny, that I have found extremely advantageous in amputating the thigh and arm; particularly the former, where it is often very difficult to save so much of the skin and muscles as to prevent a sugar-loaf stump. It is my intention to send the plate to you, with a short paper on the subject, by the middle of October; and this you may announce, if you think proper, in your next number.

I am, Gentlemen,

Chester,

Your very obedient humble Servant,

13th August, 1799.

G. ROWLANDS.

Art. 4. *Fatal Effects of a slight Puncture in the Thumb, attended with uncommon Circumstances.* Communicated by Mr. BLAIR, Surgeon of the Lock Hospital and Finsbury Dispensary, &c.

To the Society of Physicians and Surgeons.

GENTLEMEN,

ON looking into my common-place book a few days ago, I accidentally observed a memorandum of the following case, which I take the liberty of transmitting for your perusal. If it should appear to be worthy of a place in the London Medical Review and Magazine, it is entirely at your disposal.

On Tuesday the 18th of October 1796, I was desired to visit Mrs. G. of St. John Street, aged fifty-seven, who had
always

always been an active, healthy woman, before her present indisposition.

I found the whole of her left hand and fore-arm greatly tumefied, œdematous, and efflorescent, as well as very painful to the touch; vesicles had recently appeared and ruptured on the back of her hand, and the cuticle had peeled off to nearly the extent of a half-crown; the cutis upon the extremity of her left thumb was loose, and retained some ichorous matter under it. I removed the loose skin, in order to examine the subjacent part, and found the surface a little ulcerated.

On inquiring into the cause of this affection, I was told that, seven days before, Mrs. G. had pricked the end of her thumb with the splintered bone of a leg of mutton. At midnight she was attacked with a severe pain in her loins, which lasted about half an hour, and then fixed itself in the injured thumb. She got up the next morning in good health, except the pain in her thumb, and attended to her domestic concerns: but at night she was restless, her hand and arm became rather swelled, red, and painful; so that medical assistance was then judged necessary. A neighbouring apothecary was therefore called in, and, by his direction, an emollient poultice was applied to the hand.

The symptoms, however, increased so rapidly, that a physician was consulted. When the doctor first visited the patient, her hand and arm were nearly as bad in appearance as when I saw her. She was now and then delirious, her sleep was much disturbed and unrefreshing, her pulse small and frequent, her tongue brownish, and her mouth lined with an aphthous eruption. The physician ordered Peruvian bark to be taken freely, with a generous diet and wine: a linseed poultice was likewise applied to the whole fore-arm. Very soon after this a slight hiccough came on, and the other symptoms got rather worse than better until the day I was sent for, (viz. a week after the accident;) when a
spirituous

spirituous anodyne fomentation was ordered, with a large cataplasm of strong-beer grounds and oatmeal, to be renewed three times a day. We also agreed to give the musk julep and opium, in addition to the medicine before directed, and conjoined the extract of cinchona with the decoction, to be taken every three hours.

No relief was afforded by all our efforts. She continued in this state until Friday afternoon, the 21st of October; when I observed the morbid arm to be flabby and more pale than before, the left leg and right arm were become œdematous and deeply painful, the skin of the extremities was also livid, and the cuticle began to separate in several places. Although she was all this time perfectly sensible, and talked to me of her situation in a very calm and rational manner, I regarded these symptoms as the immediate forerunners of her death; which accordingly took place about nine o'clock the next morning, without any spasmodic affection whatever, except the continuance of the hiccouging before mentioned.

It may be asked, What were the predisposing causes, or peculiar state of constitution, which occasioned this fatal termination of so slight an injury? Numerous instances have happened (and I have seen several in this climate) of convulsive affections and fatal consequences following the most trivial accidents; but the train of symptoms in the present instance was not of the ordinary nature. Here was neither *trismus*, *emprostotonos*, *opisthotonos*, nor any kind of spasm of the extremities; but a remarkable depression of strength, accompanied with a general tendency to gangrene!! Could any thing more, or a better plan of treatment, have been proposed at the period of the disease in which I was consulted?

I remain, Gentlemen,

Great Russel Street,

Your humble Servant,

14th August, 1799.

WILLIAM BLAIR.

Art.

Art. 5. *Two Cases of morbid Affection of the Nerves, successfully treated with the Flores Zinci.* By Mr. CHARLES BROWN, Member of the Corporation of Surgeons, London.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

IF the following cases are deemed worthy insertion in your valuable publication, you have my authority for so doing.

Of the innumerable diseases to which mankind are liable, those denominated nervous are far from being the most inconsiderable. Facts founded on experience, tending to prevent or alleviate those evils to which diseases subject us, are certainly worthy of being communicated; and although two or more solitary cases may not throw much light upon the treatment of any disorder of known difficulty, still they assist towards an inquiry, and help to excite an attentive investigation, which, assisted by education, might add to the *ars medendi*.

Miss Ann Ward, of Queen Square, aged twenty-one years, was seized in the evening of the 9th of July, with a violent pain in the head, chiefly in the direction of the sagittal suture. This was supposed to arise from having exposed herself a great deal on that day in the sun. About eleven at night, just as she was retiring to bed, the pain was again renewed, and now extended itself all over the face, but chiefly along the course of the suborbiter nerves. A large dose of the tinctura opii was given in a peppermint draught, and she had a tolerably good night. The next morning she found herself faint and sick, her arms trembled, and she had a palpitation at the heart. These symptoms were however quieted by taking often the mixt. camph. with sp. ætheris vitr. comp. Three days after her first attack, she was seized with violent alternate contractions and relaxations

tions of almost the whole of the muscles, with intermissions of insensibility. There was a discharge of blood from the nose, and froth from the mouth. After these convulsive symptoms were over, she would lie quiet, as if asleep, and when she awoke felt sore and fatigued. When she was quite free from the paroxysm, she would make a large quantity of limpid urine. She menstruated very regularly, and always before this attack was reckoned very healthy. She was in general very costive, and her stools had a white clay-coloured appearance, as in jaundice.

Upon being consulted, I ordered three grains of the hydrargyr. muriat. mitis and one of extractum opii, made in a pill, to be taken every night *ad tres vices*. This medicine evacuated a large quantity of slime, and some worms. I then directed two grains of the flores zinci twice a day. Persisting in this plan for a fortnight, she quite recovered, and has had no return of her complaint since that period.

The *second case* was that of Mrs. Stevens's servant, in Ely Place. For nine weeks she had laboured under the most distressing nervous symptoms. Here were evident marks of approaching insanity. Headache, lowness of spirits, palpitation of the heart, tremors, globus hystericus, and frightful dreams, harassed her perpetually. After vomiting her with the Vitriol. Roman. and purging with calomel pp. I began with three grains of the flor. zinci twice a day, and the infus. quassiæ. In three weeks she was quite recovered, and is now perfectly well.

I have also given this medicine in rheumatic affections, epilepsy, and gout; in all which it seems to act as a powerful tonic.

I am, Gentlemen,

Yours, &c.

Hatton Garden,
Aug. 16, 1799.

CHARLES BROWN.

Art. 6. *Singular Case of Dysæsthesia*. Communicated to the Society by Dr. R. WHITE, of Bury St. Edmunds, Suffolk.

GENTLEMEN,

ON looking over a few observations made in the course of my practice, I have selected the following case of *Dysæsthesia*; which, if you think it worthy a place in your very useful Magazine, is much at your service.

Bury St. Edmunds,
Sept. 5, 1799.

Yours respectfully,

R. WHITE.

A PERSON, in the mercantile line, aged fifty years, low in stature, of a vigilant mind, and naturally healthy, who from his youth had been accustomed to much fatigue, and frequent exposure to wind and weather, had several years been afflicted with flatulent distensions of the stomach and bowels, attended with throbbing pain and stiffness in his limbs; and, as he feelingly expressed it, a dull, forcing pain in his joints, particularly after eating, which was sometimes relieved by a burst of wind. He was also troubled with slight shiverings, and always inclining to be costive; for relief of which he occasionally took James's pill: his appetite was generally good, and he slept soundly.

In common he had paid no further attention to his complaints, than losing a little blood once or twice in the year, taking a cup of chamomile infusion in a morning fasting, and occasionally the analeptic pill. At length, he became much alarmed in the night-time from a sudden attack of numbness in the fingers of both hands, which partially affected his arms.

I was sent for to him early the next morning, and perceived no feverish symptom; his tongue was clean and moist, his pulse round and soft, beating about seventy-two in a minute, and his urine clear, of a good colour, and in proper quantity. Upon inquiry, I discovered that this increase of symptoms had been produced from living too
freely

freely a few days before: I then ordered him the following medicines:

R Vin. ipecac. ℥j, Vin. antimon. ℥iij. M. f. haustus emeticus quamprimum sumendus.

R Tinct. amar. ℥ij, Stomach. ℥j. M. Sumat cochl. mediocre e cyatho aq. puræ bis indies.

R Gum. assafoetid. Myrrh. Aloes, āā ℥ß, Syr. q. s. Fiat massa in pil. mediocr. divid. Sumat 2 vel 3 horâ decubitûs, aut pro re nata.

On the fifth day from the attack, although the pills had gently assisted his bowels, he complained of nausea and a dead weight at the pit of the stomach, that he had scarcely any feeling in his tongue, and that his legs and feet grew stiff and numb; which latter symptom, accompanied with a dry coldness in the skin, gradually extended itself over the whole surface of his body: the fauces, stomach, and bowels became also equally destitute of feeling with the external parts. The patient having importuned me greatly for a second emetic, it was ordered, with a dram more of the antimonial wine. It retched him smartly once or twice, but brought up very little more than the former; viz. froth, phlegm, and a small quantity of bile. I then ordered as follows:

R Elect. e scammon. Rubig. ferri, āā ℥ß, Spec. aromat. ℥j, Cons. cort. aurant. ℥jß, Syr. q. s. f. elect. de quo sumat. n. m. m. mane et sero, cum poculo Infus. flor. chamœmel.

The pills to be continued, and frequent use of the flesh-brush, particularly to the legs; which were remarkably thickened, and, as he expressed it, “felt like mill-posts.”

Want of sensation still increased, and on the tenth day he had neither taste, smell, nor feeling; his hearing also began to be affected, and his appetite declined; yet his spirits and strength were tolerably good, although he was principally confined to his sofa, and scarcely able to stomp,

or rather shuffle, across the room, without an assistant. The costiveness grew obstinate, on which account the steel medicine was discontinued; and recourse was had to repeated injections of the oily stimulating and terebinthinate kind, in conjunction with a solution of Glauber's salt in infusion of senna, with tincture of the same, before a proper stool could be procured.

I then determined to try the effect of the volatile stimulus, and ordered the following draught to be taken every six hours :

℞ Sperm. ceti ʒβ, Sacch. alb. ʒj, Mucilag. gum. arabic. q. s. His bene subactis adde Sal. vol. salis ammon. gr̄ xv ad xxv. Aq. pulegii distillat. ʒjβ, Syr. zingib. ʒj. Fiat haustus. The opening mixture, and the oily injection, were still occasionally administered : a blister was also applied to the os sacrum, but with no effect. It might as well have been laid on a piece of marble !!

He had regularly persevered in this method full six days, before he had the least sense of warmth, or pungency, from the draught, the dose of volatile salt in which had been increased for the last two days to twenty-five grains, and repeated every fourth or fifth hour.

The first favourable indication was the return of sensation in the tongue and fauces, which gave the patient uncommon spirits ; at which time also he declared, with a kind of surprise, that he felt as if his stomach and bowels were let loose. He continued the draught at least three times in the twenty-four hours about six weeks, gradually lessening the dose after the first week of revival to twelve grains. He afterwards took for some time the stomach tincture as before, and now and then recurred to the aloetic pill. The thickness, tough feel, and swelling in the integuments, gradually subsided ; and, in about three months from the first application, he was perfectly recovered, and lived in general good health several years after.

Remarks.

Remarks.—The person who laboured under this singular and alarming disorder had frequently complained to me of the previous symptoms, but never regularly attended to advice. He called them rheumatics, and attributed them to repeated colds caught in riding over a long bleak causeway; at least three or four times a week, for several winters. There is no doubt of its being one cause; but the more alarming symptoms were probably occasioned from a pernicious custom which he had been rather addicted to, called whetting, or drinking several gills of white wine in a morning, Lisbon particularly,—a wine which, for the sake of clarifying it and improving its flavour, is much impregnated with sugar of lead. Dyspepsy alone will not so readily account for the torpid state of the nerves, evident proofs of which detection may be deduced from the following experiments: he could bear to be violently nipped in any part of the skin without pain; his taste and feeling in the mouth and fauces were at length so totally lost, that he was not able to distinguish brandy from water, bitter from sweet, ground pepper from flour of brimstone; neither could he perceive the least pungency from a piece of volatile salt laid on his tongue. His stools were frequently hard and knotted, and many times in the course of the last year or two he had been subject to slight constipations, which the analeptic pills and senna tea generally relieved. As his disorder increased, his appetite decreased; and his call for food seemed to arise more from the impulse of the mind than of the stomach. The swelling of the legs and thighs could not be called œdematous, being chiefly a tough puffy thickness and distention of the skin and cellular membrane, similar to the touch with that which in part characterises emphysema, and independent of confined air.

Art. 7. *Case of Injury and Exfoliation of the Cranium, from Lightning.* Transmitted by Dr. HOOPER; from Mr. SCARMAN, Surgeon, at Madras.

To the Society of Physicians and Surgeons.

GENTLEMEN,

I TRANSMIT to you the following case, not doubting that you will think it worthy a place in your valuable publication.

St. Mary-le-bone Infirmary,

ROBERT HOOPER.

August 17, 1799.

CHARLES Stillman, aged twenty-three, of an athletic habit, middling stature, and dark complexion, in consequence of an electrical explosion in the atmosphere was deprived of the powers of speech and voluntary motion, and in this state was conveyed to the surgeon. On examination, the left ankle was found abraded, and part of the skin was removed from the anterior part of the leg, thigh, and scrotum. The cartilage of the right ear and the septum narium were torn, and the hands scorched; but neither his hair nor clothes were singed. Volatile spirit being applied to the temples, he began to struggle, and froth issued from his mouth; but he did not appear to comprehend any thing that was said to him. Some water was offered him, which he swallowed with eagerness. In about two hours he became more sensible, said he felt himself exceedingly bruised, and had a sense of heat all over him, which was so great as to prevent his sleeping, although sixty drops of laudanum were given him. Oil was applied to the burnt parts.

The following day he complained of violent heat and great thirst, his pulse was small and quick, and his tongue white. His legs were so benumbed that he was unable to walk, but he had no pain except that arising from the sores. Six grains of gum guaiacum and half a grain of opium

opium were directed to be taken every four hours, and two grains of opium at night. Rice-water with lime-juice and sugar were ordered for his common drink, and he was allowed some soup and fresh provisions.

He was slightly delirious in the night, but slept two hours towards morning, and perspired freely. The numbness of the extremities went off, leaving only a stiffness in the left knee. Accidentally passing his hand over his head, he perceived one part was insensible, and spoke of it to the mate; but no notice was taken of it till the next day, when a sanious fluid issued out, and a portion of the scalp, of the size of half a crown, directly over the right side of the coronal suture, was found dead, and beginning to putrefy. Pledgets moistened with tincture of myrrh were applied, and some basilicon on cloth over them.

The slough soon began to separate. Bark and wine were exhibited, and a grain of opium was given every night. When the slough had entirely come away, a portion of the cranium about the size of a shilling was left bare, the coronal suture passing exactly through the middle. The tincture of myrrh appearing to irritate too much, digestive ointment only was applied, and the bark and wine continued. The other sores were now nearly healed, and were dressed only with simple cerate.

On the 21st of August the bone appeared loose. The patient complained of slight vertigo and shooting pain, with nausea, and an accelerated pulse. But on the 24th the exfoliation was removed*, and all the morbid symptoms disappeared. His general health is now good, and there is not the least doubt of his perfect recovery.

* The portion of exfoliated bone was sent to Dr. Hooper, with the above communication.

Art. 8. *Case of Amaurosis, connected with Colica Saturnina:*
by Dr. ZINKEN, Aulic Counsellor and Court Physician
at Brunswick.

ON the 15th Oct. 1796, L. L. a young man, aged nineteen, of a slender make, and who had already laboured four weeks under the colica saturnina, attended with costiveness and vomiting, was brought into the hospital of this place (Brunswick.)

The patient from his infancy had always been healthy, if we except tinea capitis and occasional hæmorrhagy from the nose, to which he was subject. But from the period that he began to learn the profession of painting he had frequently suffered from colic pains, which were slowly removed by the usual remedies, and generally returned in the course of a few weeks.

About the beginning of September, 1796, he was again seized with acute pain in the bowels, and attended with a sense of weight, which was relieved in some measure by his lying on his back. His appetite was keen, and he seldom had a stool oftener than once in three days. This was always in small quantity, and consisted of hard fragments of excrement. He began soon to suffer great anxiety during the night. Frightful dreams drove him frequently from his bed, and a tremor of the hands and vomiting occurred. Such were the principal circumstances of the case when he was brought into the hospital, and when I first saw him.

At present the state of his disease is as follows:

A sense of violent burning, and a sense of tearing pain, which alternate with each other, and which chiefly occupy the region of the umbilicus. When violent, these pains extend themselves to the back and breast, and are accompanied with a sensation as if the intestines were twisted in different directions. These symptoms are followed by tenesmus,

mus, and the vomiting of a sour phlegm, which is seldom mixed with bile, but generally with the food, drink, and medicines he had swallowed some time before.

The patient frequently complains of a burning in the œsophagus, which produces such a spasmodic contraction in that part, that it is with extreme difficulty he can swallow any fluid. Slight pressure on the abdomen does not produce pain, except he is suffering from a severe attack; but it is hard, and drawn inwards towards the back-bone: the false ribs and ossa ilia project very much; the navel forms a hollow, and the orifice of the anus is drawn upwards. The patient has only had one stool, and that accompanied with severe pain and straining. The excrementitious matter itself was hard, of a darkish brown colour, and like sheep's dung in form. The evacuation did not afford the patient the smallest relief. His hands are affected with tremor. The right eye is turned in completely towards the nose, so that a portion of the lucid cornea is hidden in the internal canthus. The pupils of both eyes are very much dilated, and the patient often sees objects double, particularly the light of the candle at night. He does not sleep any during the day, and very little during the night, when he is always restless, anxious, and tormented with such frightful dreams as often drive him unconsciously out of his bed and bed-chamber. His memory is impaired, his tongue clean, except on the posterior part, where it is covered with a little white film. His appetite is keen, but almost all the food he eats is soon returned by vomiting; his thirst is natural; his urine pale, and voided without pain; his skin is dry, and where it is exposed to the air it is hard; the pulse is small, and hard like a wire, and beats from sixty-five to seventy in a minute.

My indications of cure, says Dr. Zinken, were:

1st. According to Lentin's method, to diminish the deleterious property of the lead, and to separate it from the

acid of the stomach, with which in this case it was evidently united.

2dly. To involve the particles of lead, and sheathe the intestines by means of oily and mucilaginous remedies.

3dly. To remove the costiveness and allay the spasms, by means of gentle purges, glysters, and sedative remedies.

Agreeably to these indications of cure, I ordered him a cupful of the following mixture every hour :

℞ Fol. sennæ ʒvj, Rad. rhæi, Valerian. āā ʒij. Infundesum Aq. fontan. ebullient. q. s. Colatur. ʒiiij. Adde Sal. tartar. ʒß, Ol. lini suff. quant. Mucilag. Gum. tragacanth. subact. ʒij. M.

Independently of this, I caused the patient to drink an infusion of linseed and camomile flowers ; warm softening and antispasmodic fomentations were applied to the abdomen, and glysters of the same nature were injected. Four days were these remedies employed without benefit. The mixture and infusion were now and then kept on the stomach half an hour ; but for the most part they were brought up like food, soon after he had swallowed them. The glysters were either thrown out during the time of administration, or else soon after, without any good effect.

On the 20th Oct. the patient had a stool, but of the kind already described, and without any effect on the disease. The *sal tartari* was now increased to two scruples, and the rhubarb, instead of being infused, was added in the form of powder. On the abdomen, warm oil of camomile and laudanum were rubbed, and the other remedies continued with these until the 22d. The disease gained ground, and the patient began to see all objects double, and as if through a thick cloud. The pulse only beat fifty-six in a minute, and the obstinate costiveness remained.

The extract of hyosciamus, given in doses of three grains four times a day, besides the other medicines, did not afford the smallest relief.

I was

I was now obliged to have recourse to opium*, which I gave united in infusion with valerian, senna leaves, and epsom salts, to which was added some Liq. anodyn. Hoffmanni. The embrocation, infusion, and glysters, were continued. As these remedies did not afford any relief, I gave the patient oil combined with mild purges, and three times a day from fifteen to thirty drops of laudanum. To each glyster were added sixty drops of tinct. opii, and a few drops of emetic tartar; and as an embrocation for the abdomen, I ordered the liniment. ammoniæ cum ol. hyosciami.

Notwithstanding these remedies, the vomiting and pains continued to increase, and yet the patient now retained the glysters a quarter of an hour. The pulse only beat fifty-five in a minute, was small, hard, and tense. The symptoms of amaurosis also increased, and only permitted the patient to distinguish day from night. Both pupils were very much dilated and immoveable. Ipecacuanha in small doses, the artificial musk, and hepar sulphuris, were all tried in vain.

On the 30th Oct. I ordered the following powder every three hours †. R Pulv. aluminis crud. gr xv, Gum. arab. gr v. M. f. pulv.

Every other remedy was laid aside, except the embrocation. As the patient began to take this remedy in the afternoon, he could only take two doses this day. Imme-

* The reasons why I did not do so sooner will be found in Baglivi, (Prax. Med. lib. i. § 1.) Fr. Hoffman, (Med. Rat. System. t. iii. p. 241.) and Lentin, (Memorabilia Cereæ Aërem Vitæ Genus Sanitatem et Morbos Clausthalienis, p. 115.)

† Grashuys (de Colica Pictorum) appears to be the first who recommended alum in this disease. His remedy however was very complicated. Percival (Observations and Experiments on the Poison of Lead, 1774) cured a case of colica pictorum with alum and spermaceti. Quarin (in his Animadvers. Practic. Vendob. 1786, p. 187.) also praises it.

diately after the first was swallowed the vomiting ceased. The second powder also remained on his stomach, as well as a little soup which he had taken. But the violent colic pains and other symptoms continued. The first powder which he took the following day was rejected, but the second and every succeeding one stayed on his stomach. The next day at three o'clock, after the patient had taken five powders, he had a copious stool, which consisted of hard black-coloured pieces of excrement; and at eight o'clock in the evening another of the same kind was voided; after which the pains subsided so much, and the patient experienced such relief, that he slept tranquilly that night.

The alum was continued, and an infusion of senna leaves and valerian, to which some oil was added, was given in intervals. This had the happiest effects.

1st Nov.—He had five copious stools of a liquid nature, mixed with fragments of hardened fæces. The abdomen became softer and the navel more elevated, and the oppression and anxiety left him entirely. The patient now only complained of a slight pinching pain in the belly, which did not return often. This amelioration, however, did not produce any good effect on the secondary disease. The pulse as yet beat only forty-five in a minute, and was as hard and small as ever. The right eye remained unmoved, the pupils of both eyes greatly dilated, and a complete amaurosis had taken place. The hands were affected with tremor when moved; and, excepting the night which succeeded the first copious evacuation by stool, he has had slight deliria and fearful dreams. His tongue was clean; hunger and thirst natural; and the urine darker coloured than it had been; it was clear, and, after settling, a cloud was observed suspended in it.

Until the 5th of November I gave the patient daily three powders of alum, together with some of the above-men-
tioned

tioned mixture. During this time the pains ceased entirely, the belly was natural, and the stools, of which he had from three to four every day, were no longer of a bad nature. The pulse was forty-one in a minute.

In order to attack the secondary disease, particularly the amaurosis, the flores arnicæ montanæ seemed to be indicated, and I therefore caused valerian, senna leaves, and one drachm of the flores arnicæ, to be infused in eight ounces of water; one table-spoonful of which he took every hour. I likewise ordered him to rub the parts above and below the eyes with lin. ammon. and tinct. cantharid: and I applied a blister behind the ears. On the 9th Nov. the arnica was doubled and the senna omitted, in consequence of a diarrhœa having occurred. On the 11th Nov. the pulse beat forty-five, and the right eye was turned a little outward from the inner canthus. The diarrhœa was reduced to five stools a day. The arnica was now given by itself in infusion, and the dose was gradually increased, so that by the 14th Nov. the patient drank a cupful every two hours of an infusion of six drachms of arnica in nine ounces of water. This day, for the first time, he could distinguish light from darkness; and when a strong light fell on the eyes they were observed to be a little moveable. He now and then felt a pain in his eyes, and they were often filled with water. The squinting of the right eye was now scarcely to be discerned, and the tremor of the hands had subsided. The pulse beat fifty-four in a minute; the skin dry, and the nocturnal deliria still occurred. The remedy was continued in the same way until the 17th, during which the recovery was gradual. A scruple of the arnica was now given four times a day; the feet were put into warm water with mustard at night, and blisters were applied behind the neck. The night was passed tranquilly, and the blisters had risen well the next morning. The pulse was now seventy-two in a minute. The pupils of
I both

both eyes were smaller and more moveable, and the patient could count any number of fingers which were presented to him. The right eye was now in its proper place, and the skin softer.

The arnica was increased in quantity every day, and stimulating pediluvia exhibited every night. As the blisters were applied for the sake of their stimulating property, they were not kept open, but frequently renewed on the neck, behind the ears, and on the calves of the leg.

From the 20th to the 27th Nov. I joined camphor to the arnica, which caused the skin to become soft, and the deliria to subside entirely. I was obliged, however, to omit the camphor very soon, as it occasioned a sense of suffocation and contraction about the glottis. Instead of the camphor I gave the emetic tartar in the following manner: *R Tart. emet. gr viij. Solve in aq. distillat. ℥j. M.* Of this solution twenty drops were taken three times a day. Half an ounce of the arnica, in the form of an electuary, was also taken daily. The quantity of the latter was the same until the 1st Dec. but the drops were increased to eighty thrice a day. Under this treatment the patient grew gradually better. The patient viewed near objects, as through a cloud. He saw better in the morning than in the evening, and better forward and downwards than upwards. On the 1st December he could discern, all objects at the distance of twenty steps; and large objects, such as houses, trees, and spires, he could see at five hundred paces. He could also read the signatures on the phials of medicine, and could distinguish the principal colours, but not their finer shades.

As the arnica seemed now to have lost its power, I increased the quantity to six drachms a day, and gave one hundred and thirty of the drops three times a day. No farther amelioration ensued; but, on the contrary, the patient seemed to grow worse; the dark cloud before the eyes increased

increased in size; the abdomen began to grow tense and hard, slight pinching pains were felt in it, and the hands were somewhat affected with tremor. A purge of jalap and calomel removed all these symptoms. I now caused a seton to be introduced in the nape of the neck, and desisted from giving him any more of the arnica, in the hope that after an interval it would produce a better effect. From the 15th Dec. to the 26th he took from eight grains to a scruple of the sal cornu cervi three times a day, in consequence of which his sight at first grew better, but at last became stationary. I then again commenced a trial with the flor. arnica, to which I joined the root; which trial was continued until the 5th Jan. but the patient grew worse in the same manner as above-mentioned.

As the patient was by trade a painter, and required a good sight, I tried the following remedies, partly with and partly without indication: Kermes mineral alone, from three to nine grains thrice a day; and afterwards in combination with calomel, tartarus tartarisatus, and emetic tartar—The extract. pulsatil. nigricans, from two to eight grains thrice a day—Valerian in substance, in the same doses as the arnica, three times a day—The ext. cicutæ, in increasing doses to the amount of a drachm a day—The ext. aconiti, in doses of two grains thrice a day.

Many of these remedies at first appeared to do a little good; but they soon ceased to produce this effect. Venesection in the foot and arm, and pediluvia, were of more service. Application of cold to the eyes and forehead was beneficial, but leeches applied around the eyes did not produce any effect.

The medicines which did most good, next to the arnica, were the following pills:

R Sapon. antimonial. cum gum. guaiac. Ext. cicutæ, āā ʒss, Aconiti gr̄ xij—xxiv, Pulv. herb. cicutæ, q. s. F. mass. pil. divide in pil. pond. gr̄ ij.

Of these pills, from ten to fifteen were taken three times a day, from the beginning of March until the middle of April. Since then, he did not take any medicines. He is still however short-sighted, particularly so in the right eye; but yet he sees so well as to prosecute his trade, and gains his livelihood by painting.

At present he is using electricity by my desire. He receives the electrical stream from a blunt wooden point on the eye. It is now six weeks since the electricity was first applied. His sight is so much improved by it that I have great hopes of his being quite restored. I. M.

Art. 9. *On the Salt of Scrophula.* By Professor FISCHER.

PROFESSOR Fischer, of Kiel, some time back received a body which was full of scrophulous tumours. The cervical and inguinal glands, the pancreas, and in short every glandular part, formed a large indurated scrophulous tumour. He wished to preserve these as specimens for his class, and accordingly put them into spirits of wine. But what was his astonishment, one day as he examined his preparation, to see the whole covered with fine prismatic crystals!! He separated these; and, in order to discover whether they had been accidentally in the spirits or came from the tumours, he put the preparation into fresh spirits. In a few weeks time the glands were again observed to be covered with crystals. These were educted, and a third quantity obtained in the same manner. They were given to a skilful chemist, who examined them, and found them to be almost entirely the acid of sugar.

“ This is a new proof,” says Dr. Hufeland, from whose journal we have extracted this fact, “ of the great chemical changes and new compositions which take place in our frame from changes in the actions of life; and it leads us
to

to hope that by means of the united talents of the physician at the bedside of the patient, and the application of reagents to living matter, and the chemical analysis of dead parts, we shall ultimately obtain better information concerning the immediate cause of diseases and the mode of curing them.” J.

Art. 10. *Medical and Chirurgical Prize Questions, at the College of Medicine, Amsterdam.*

FOR THE YEAR 1800.—“What is the general indication in the treatment of herniæ? What are the special indications in various cases, and their different periods? What are the circumstances upon which the surgeon should fix his attention? and What light have authors and chirurgical observators thrown on this subject?”

FOR THE YEAR 1801.—“Amongst the number of external remedies invented and applied for the cure of herniæ, the bandage is undoubtedly the most used: the history of this instrument to the present time is nevertheless not thoroughly known, although it is essential to the surgeon in order to make a comparison;—thence arises the following question:

“At what period was the hernial bandage (*bandage herniare*) invented? What changes and ameliorations has it undergone from time to time, relative to its construction? and What authors, ancient and modern, merit to be consulted on this subject?”

Answers to these questions are to be written in Latin, French, German, or Dutch; those in German to be accompanied by a Latin letter, not containing the name of the author, but a motto, and a sealed note with the same device, and the name, titles, and place of residence of the author.

The packets must be sent free of all expense, before the

1st day of March, in the respective years, directed to Mons. Mons. A. Bonn, Professor of Anatomy and Surgery, or to Dr. F. E. Willett, Inspector of the ci-devant College of Medicine at Amsterdam.

The value of the gold medal, to be given to the author of the best dissertation on each of the above subjects, is three hundred florins. Physicians and surgeons of all nations are invited to strive for the prize. A.

Art. 11. *Autumnal Lectures in London and Edinburgh, upon the different Branches of Medical Education.*

I. LECTURES IN LONDON.

Anatomy.	Oct. 1.	Mr. Cruikshank and Mr. Wilson, <i>Great Windmill Street.</i>
	Oct. 7.	Mr. Cline and Mr. A. Cooper, <i>St. Thomas's Hospital.</i>
	Oct. 1.	Mr. Blizard and Mr. Thomas Blizard, <i>London Hospital.</i>
	Oct. 1.	Dr. Marshall, <i>Bartlett's Buildings.</i>
Surgery.	Oct. 7.	Mr. Abernethy, <i>St. Bartholomew's Hospital.</i>
	Oct. 7.	Mr. J. Pearson, <i>Golden Square.</i>
	Oct. 7.	Mr. J. Wilson, <i>Argyle Street.</i>
	Nov. ...	Mr. Abernethy, <i>St. Bartholomew's Hospital.</i>
Chemistry.	Nov. 1.	Mr. Astley Cooper, <i>St. Thomas's Hospital.</i>
	Oct. 2.	Dr. Fordyce, <i>Essex Street.</i>
	Oct. 7.	Dr. Crichton, <i>Clifford Street.</i>
	Oct. 5.	Dr. G. Pearson, <i>Leicester Square.</i>
Medicine.	Oct. 3.	Dr. Babington, <i>Guy's Hospital.</i>
	Oct. 4.	Dr. Powell, <i>St. Bartholomew's Hospital.</i>
	Oct. 2.	Dr. Fordyce, <i>Essex Street.</i>
	Oct. 2.	Dr. Saunders and Dr. Babington, <i>Guy's Hosp.</i>
	Oct. 7.	Dr. Crichton, <i>Clifford Street.</i>
	Oct. 5.	Dr. G. Pearson, <i>Leicester Square.</i>
	Oct. 4.	Dr. Roberts, <i>St. Bartholomew's Hospital.</i>
		<i>Midwifery.</i>

- Midwifery. { Oct. 3. Dr. Osborn and Dr. Clarke, *New Burlington St.*
 Oct. 3. Dr. Lowder and Dr. Haighton, *Guy's Hosp.*
 Oct. 1. Dr. Thynne, *St. Bartholomew's Hospital.*
 Oct. 1. Dr. Dennison and Dr. Squire, *London Hospital.*
 Oct. 7. Dr. Batty, *Great Marlborough Street.*
 Oct. 3. Mr. Pole, *Leadenhall Street.*

Animal Economy. Oct. 7. Dr. Haighton, *Guy's Hospital.*

Nature of Health. Nov. ... Mr. C. Brown, *Brewer Street.*

Botany.—Dr. Thornton, *Guy's Hospital.*

Natural History.—Dr. Shaw, *Leverian Museum.*

Experimental Philosophy. { Oct. 3. Rev. Mr. Roberts, *Guy's Hospital.*
 ----- Mr. Walker, *Conduit Street.*
 ----- Mr. Wilkinson, *St. Bartholomew's Hospital.*

II. LECTURES IN EDINBURGH

Commence on Wednesday, Oct. 30.

Anatomy and Surgery. Dr. Monro,—Dr. Barclay,—Mr. Ramsay,—and Mr. John Bell.

Chemistry and Chemical Pharmacy. Dr. Hope, — and Mr. Neilson.

Dietetics, Materia Medica, and Pharmacy, Dr. J. Home.

Theory of Physic. Dr. Duncan.

Practice of Physic. Dr. Gregory.

Midwifery. Dr. Hamilton.

Animal Economy. Mr. Allen.

Clinical Lectures on the cases of patients in the Royal Infirmary, by Dr. Duncan and Dr. Rutherford, on Tuesdays and Fridays, at five o'clock in the evening—the first lecture by Dr. Duncan on Tuesday, Nov. 12.

Dr. Rutherford will begin a *Course of Botany* in May 1800. And,

About the same time, Dr. Walker will begin a *Course of Natural History.*

V. W.

Art.

Art. 12. *Observations on the Irritability of the Animal and Vegetable Fibre.*

NOTWITHSTANDING the many experiments and inquiries which have been made to illustrate the phenomenon of *irritability in the animal and vegetable fibre*, much is still wanting. Girtanner ascribes it chiefly to oxygen : but the proofs which he gives in support of his opinion do not appear satisfactory ; since the air does not seem to have a direct influence on the irritability of the heart. For example, if the vein of an animal be opened, and if a bubble of vital air or oxygen gas can be introduced into it, by means of a small tube ; as soon as the air reaches the heart the animal sends forth a cry of pain, and expires. BICHET, who made this experiment*, repeated it with atmospheric air, azot, hydrogen, and the carbonic acid gas, and the animal perished in the like manner ; but cold water injected into a vein does not produce the like effect. Bichet concludes, that the death of the animal is occasioned by the interception of the air between the columns of the arterial and venal blood : but, in this case, we may rest assured that oxygen gas destroys the animal. Dr. MENZIES observed, that the irritability of the heart preserved itself longer in animals strangled or drowned than in those which perished in gas. He thence concludes, that the particular state which the blood acquires in passing through the lungs, and which gives it those sensible qualities that distinguish the arterial from the venal blood, is not the real cause which gives play to the irritability of the heart, but that the action is particularly owing to the *effect of heat combined with humidity*. Others have sought for the cause of irritability in electricity, and the experiments on Galvanism seem to give weight to this opinion. VAN MARUM, HILDEBRANT, and other philosophers, think that there is a real *irritability* in plants, and particularly in those which have spontaneous kinds of

* Société Philom. page 18.

movement. It has thence been asserted, that oxygen has the same effect upon those plants called sensitive, such as the humble plant (*mimosa pudica*), the *hedysarum gyrans*, &c. as upon animals. PESCHIER has made several experiments to ascertain whether this opinion was well founded; but oxygen never appeared to him to produce any effect upon these plants. He afterwards examined whether these movements of those plants called sensitive are owing to *real irritability*, like that of animals. The numerous experiments which he made on this subject gave him reason to conclude, that *no real irritability could be ascribed to these plants*, and that all the movements they experience, by the simple touch or otherwise, are merely mechanical; and indeed plants have neither nerves nor muscles, nor any organs analogous to those which, in animals, appear to be the seat of irritability.

U. T.

Art. 13. *Current Price of Drugs in the London Market.*

			£. s. d.			£. s. d.				
ALMONDS, bitter	—	—	from	3	6	0	to	3	8	0 cwt.
— sweet	—	—	—	4	15	0	—	5	0	0 —
— Jourdan, new	—	L.	—	16	0	0	—	18	0	0 —
— Valentia, best	—	—	—	6	0	0	—	6	15	0 —
Aloes, Barbadoes	—	—	—	12	0	0	—	0	0	0 —
— hepatic	—	—	—	14	0	0	—	16	0	0 —
— Cape	—	—	—	3	16	0	—	4	0	0 —
— Soccot.	—	—	—	20	0	0	—	22	0	0 —
Alum, roach	—	—	—	1	14	6	—	0	0	0 —
— English	—	—	—	25	0	0	—	26	0	0 —
Ammoniacum, in lump	—	—	—	10	0	0	—	16	0	0 —
— in drops	—	—	—	22	0	0	—	0	0	0 —
Angelica root	—	—	—	3	5	0	—	4	0	0 —
Antimony, crude	—	—	—	2	2	0	—	0	0	0 —
Aqua fortis	—	—	single	0	1	1	dou.	0	1	10 lb.
Arsenic, yellow	—	—	from	2	18	0	to	3	0	0 cwt.
— white	—	—	—	2	18	0	—	3	0	0 —
— red	—	—	—	15	0	0	—	0	0	0 —
Assafoetida	—	—	—	7	0	0	—	16	0	0 —
Balsamum Copaivæ	—	L.	—	0	9	0	—	0	0	0 lb.
— Peruvianum	—	—	—	0	8	6	—	0	9	0 —
— Tolutanum	—	—	—	0	3	6	—	0	0	0 —
Barilla, Spanish	—	—	—	uncertain						
— Teneriffe	—	—	—	2	2	0	—	2	4	0 —
Bark, common Peruvian	—	—	—	uncertain						
— red	—	—	—	0	2	9	—	0	3	0 —
— second	—	—	—	0	3	0	—	0	4	6 —

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Bark.

Bark, quill, or best	—	—	from	0	8	0	to	0	0	0	lb.
— yellow	—	—	L.	0	2	9	—	0	0	0	—
Barley, English pearl	—	—	—	1	3	0	—	0	0	0	cwt.
— foreign ditto	—	—	—	1	8	0	—	0	0	0	—
Benzoë	—	—	—	10	0	0	—	28	0	0	—
Borax, refined, East India	—	—	—	12	0	0	—	14	0	0	—
— unrefined	—	—	—	6	10	0	—	7	0	0	—
— English	—	—	—	0	2	8	—	0	2	9	lb.
Camphire, refined	—	—	L.	0	15	0	—	0	15	6	—
— unrefined	—	—	L.	57	0	0	—	0	0	0	cwt.
Cantharides	—	—	L.	0	9	0	—	0	9	6	lb.
Cardamoms, best	—	—	—	0	17	0	—	0	0	0	—
Carraway seeds, foreign	—	—	H.	1	12	0	—	1	16	0	cwt.
— English	—	—	L.	2	0	0	—	2	5	0	—
Cassia buds	—	—	—	21	0	0	—	22	0	0	—
— fistula	—	—	—	2	10	0	—	0	0	0	—
— ligna	—	—	—	16	10	0	—	17	0	0	—
Castor, American	—	—	—	0	6	0	—	0	8	0	lb.
— oil	—	—	H.	0	4	6	—	0	4	8	bile.
— Russia	—	—	—	uncertain							
Cerusa acetata	—	—	—	0	2	0	—	0	2	2	—
Cinnamon	—	—	—	0	9	0	—	0	9	6	lb.
— bonded	—	—	—	0	4	8	—	0	4	10	—
Cloves	—	—	—	0	6	9	—	0	6	10	—
— bonded	—	—	L.	0	3	9	—	0	0	0	—
Cochineal, East India	—	—	—	0	6	0	—	0	10	0	—
— Spanish, garbled	—	—	L.	1	1	0	—	1	3	0	—
Colocynth, Turkey	—	—	—	0	4	6	—	0	4	9	—
Colombo root	—	—	—	36	0	0	—	0	0	0	cwt.
Coriander seeds, English	—	—	—	1	0	0	—	1	1	0	—
Cream of tartar	—	—	L.	5	5	0	—	5	13	0	—
Cumin seeds	—	—	—	2	0	0	—	2	8	0	—
Foenugreek seeds	—	—	—	1	10	0	—	1	12	0	—
Galbanum	—	—	—	16	0	0	—	18	0	0	—
Galls, best Aleppo	—	—	—	8	0	0	—	8	5	0	—
— mixed	—	—	—	7	0	0	—	7	7	0	—
Gamboge	—	—	—	24	0	0	—	26	0	0	—
Gentian root	—	—	—	2	18	0	—	3	0	0	—
Ginger, Jamaica, black	—	—	L.	2	4	0	—	2	8	0	—
— white	—	—	—	3	10	0	—	5	0	0	—
— Barbadoes	—	—	—	3	15	0	—	4	0	0	—
— East India	—	—	—	uncertain							
Ginseng root	—	—	—	0	7	0	—	0	7	6	lb.
Guaiaicum	—	—	—	0	4	6	—	0	5	6	—
Gum Senegalense, ungarb.	—	—	—	15	15	0	—	16	10	0	cwt.
— garb.	—	—	—	17	0	0	—	17	10	0	—
— Arabic, East India	—	—	—	uncertain							
— Turkey	—	—	—	uncertain							
Ipecacuanha root	—	—	—	0	15	0	—	0	15	6	lb.
Isinglass, leaf	—	—	—	0	5	3	—	0	5	6	—
— book	—	—	—	0	4	9	—	0	5	0	—
— long staple	—	—	—	0	5	6	—	0	0	0	—
— short staple	—	—	—	0	5	0	—	0	7	0	—
Jalap	—	—	L.	0	4	0	—	0	0	0	—
Juniper berries, German	—	—	—	1	2	0	—	1	4	0	cwt.
— Italian	—	—	—	1	2	0	—	1	3	0	—
Lac, shell	—	—	—	uncertain							
— stick	—	—	—	uncertain							
Linseed	—	—	H.	2	4	0	—	2	12	0	Q.
Liquorice, Italian	—	—	—	7	10	0	—	7	15	0	cwt.

1

Liquorice

			£.	s.	d.		£.	s.	d.	
Liquorice, Spanish	—	from	6	5	0	to	7	0	0	cwt.
Mace, long	—	—	1	6	0	—	1	7	0	lb.
— bonded	—	—	1	1	6	—	1	2	6	—
Madder root, best	—	—	6	0	0	—	6	6	0	cwt.
Manna in flakes	—	—	0	4	6	—	0	4	9	lb.
— sort	—	—	0	1	2	—	0	1	6	—
— Tolpha	—	—	uncertain							
Mastic	—	—	0	3	6	—	0	4	0	—
Musk, China	—	L.	1	7	0	—	0	0	0	oz.
Mustard, white	—	L.	0	6	0	—	0	12	6	lb.
— brown	—	—	0	10	0	—	0	17	0	bl.
Myrrh	—	—	12	0	0	—	23	0	0	cwt.
Nitre, rough	—	—	uncertain							
— refined	—	—	uncertain							
Nutmegs, sound	—	—	0	18	0	—	1	1	0	lb.
— bonded	—	—	0	16	0	—	0	16	9	—
Nux vomica	—	—	7	10	0	—	8	0	0	cwt.
Oil, Lucca, or salad	—	—	13	0	0	—	13	13	0	jar.
— Spanish	—	—	76	0	0	—	78	0	0	ton.
— linseed, English	—	H.	48	0	0	—	0	0	0	—
— palm	—	—	uncertain							
Olibanum	—	—	6	0	0	—	8	0	0	cwt.
Opium, Turkey	—	L.	0	16	0	—	0	0	0	lb.
— East India	—	—	0	11	0	—	0	0	0	—
Opoponax	—	—	40	0	0	—	42	0	0	cwt.
Pepper, white	—	—	0	1	5½	—	0	1	6	lb.
— short, long	—	—	10	0	0	—	10	10	0	cwt.
Pimento	—	—	0	0	9¼	—	0	0	9½	lb.
Quicksilver	—	L.	0	3	8½	—	0	0	0	—
Resin, English black	—	—	0	12	0	—	0	14	0	cwt.
— yellow	—	—	0	14	0	—	0	15	0	—
— foreign black	—	—	0	8	0	—	0	0	0	—
— yellow	—	—	0	12	0	—	0	0	0	—
Rhubarb, East India	—	—	0	6	0	—	0	9	6	lb.
— Russia	—	H.	0	14	0	—	0	15	0	—
Saffron, Spanish	—	—	1	19	0	—	0	0	0	—
— French	—	—	none							
Sago	—	—	5	15	0	—	6	0	0	cwt.
Sal ammoniac	—	H.	10	0	0	—	10	10	0	—
Salop	—	—	uncertain							
Sandarac	—	—	5	0	0	—	5	5	0	—
Sarsaparilla	—	—	0	5	0	—	0	5	3	lb.
Sassafras	—	—	uncertain							
Scammony, Aleppo	—	—	1	4	0	—	1	6	0	—
— Smyrna	—	—	uncertain							
Senna	—	—	0	5	0	—	0	5	3	—
Snake root	—	—	0	4	6	—	0	0	0	—
Soap, Castile	—	—	5	10	0	—	6	0	0	cwt.
Spermaceti, refined	—	—	0	2	2	—	0	0	0	lb.
Sulphur, foreign, rough	—	—	25	15	0	—	26	0	0	ton.
Tamarinds, West India	—	—	uncertain							
Tapioca, Lisbon	—	—	0	1	6	—	0	0	0	lb.
Tragacantha	—	—	17	0	0	—	18	0	0	cwt.
Turmeric, Bengal	—	—	uncertain							
— China	—	—	uncertain							
Turpentine, American	—	—	1	2	0	—	0	0	0	—
— oil of, English	—	—	3	15	0	—	0	0	0	—
Verdigrise, wet	—	—	0	2	0	—	0	2	6	lb.
— dry	—	H.	0	2	10	—	0	3	0	—

Vermilion,

Vermilion, town-made	—	from	£.	s.	d.	to	£.	s.	d.	lb.
Vitriol, Roman	—	—	4	0	0	—	4	4	0	cwt.
oil of	—	—	0	0	5	—	0	0	0	lb.
Wax, Dantzic	—	H.	9	5	0	—	10	0	0	cwt.
Hambro', white	—	L.	0	2	5	—	0	2	7	lb.
bees, English	—	—	9	15	0	—	10	0	0	cwt.
American	—	—	8	10	0	—	9	0	0	—

** The letter H. denotes that the price is getting higher, and L. the contrary.

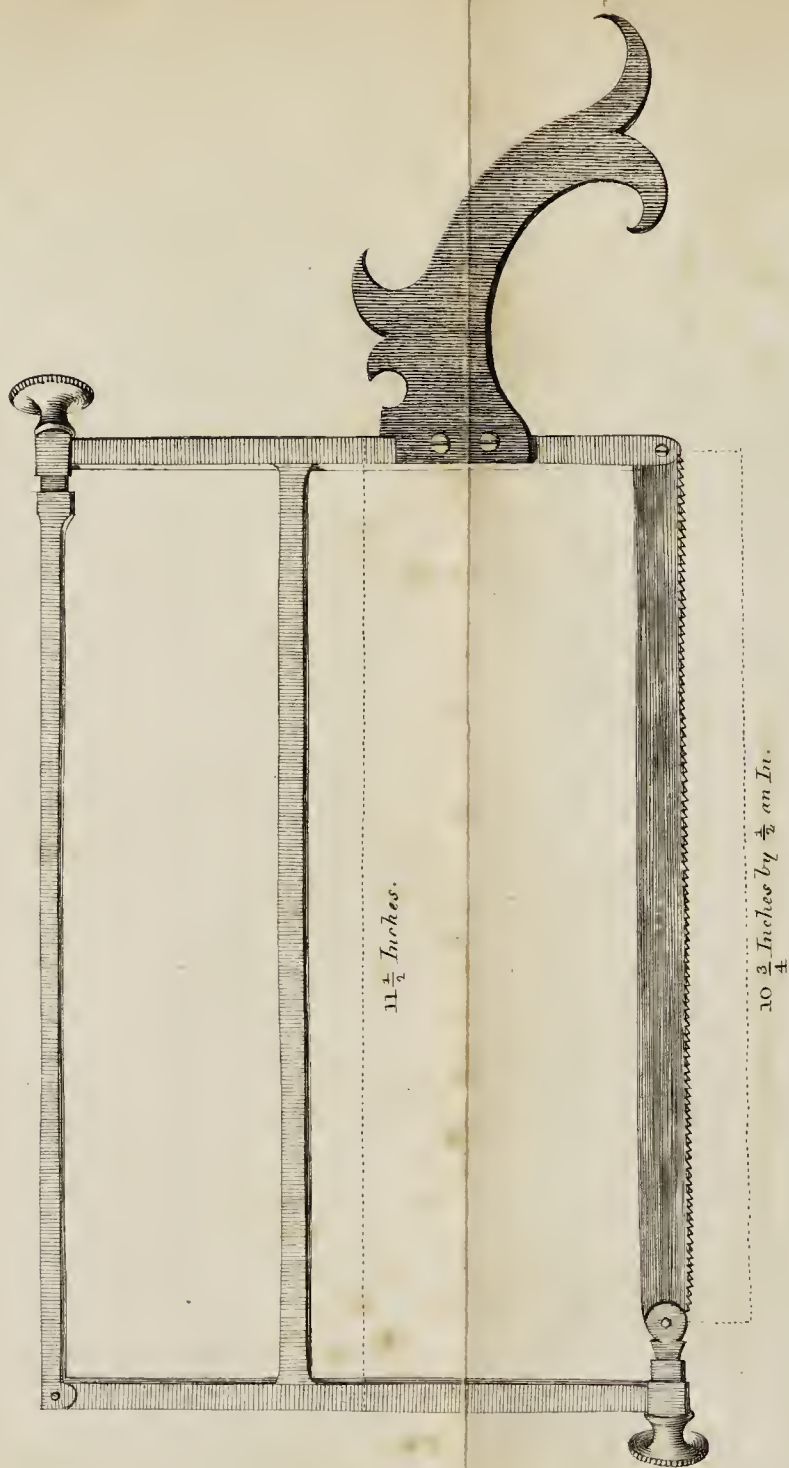
Art. 14. A Meteorological Table, for 1798; copied from the Philosophical Transactions of the Royal Society.

1798.	Six's Therm. without.			Thermometer without.			Thermometer within.			Barometer*.			Hygrometer.			Rain.
	Greatest height.	Least height.	Mean height.	Greatest height.	Least height.	Mean height.	Greatest height.	Least height.	Mean height.	Greatest height.	Least height.	Mean height.	Greatest height.	Least height.	Mean height.	Inches.
January	53	28	39,6	53	29	40,1	59	49	53,5	30,52	28,96	29,94	90	73	82,8	1,105
February	54	24	39,9	54	24	40,1	58	49	54,2	30,76	29,23	30,11	90	71	82,2	0,693
March	58	30	42,9	58	30	42,9	61	50	55,4	30,37	29,18	29,93	90	68	79,8	0,333
April	69	30	51,6	69	31	52,7	66	53	59,8	30,38	29,27	29,96				0,517
May	76	43	56,5	75	46	57,3	66	58	60,6	30,44	29,11	30,00	69	30	51,4	1,621
June	86	47	64	86	51	64,8	71	62	65,8	30,42	29,65	30,07	69	32	50,1	0,960
July	78	51	63,9	76	54	64,4	72	64	65,9	30,17	29,36	29,80	74	38	55,8	2,879
August	83	52	65,0	82	55	63,9	72	66	68,5	30,35	29,70	30,09	70	41		1,525
September	76	44	58,9	76	45	59,2	70	58	64,2	30,26	28,97	29,78	73	37	2,437	
October	64	32	51,8	63	33	52,4	63	57	60,7	30,39	29,16	29,90	82	45	3,428	
November	60	25	41,6	60	25	42,4	62	48	55,4	30,27	28,69	29,58	93	57	3,056	
December	50	11	35,2	50	14	35,5	57	38	50,3	30,58	29,27	29,90	95	53	0,857	
Whole year			51,0			51,3			59,5			29,92				19,411

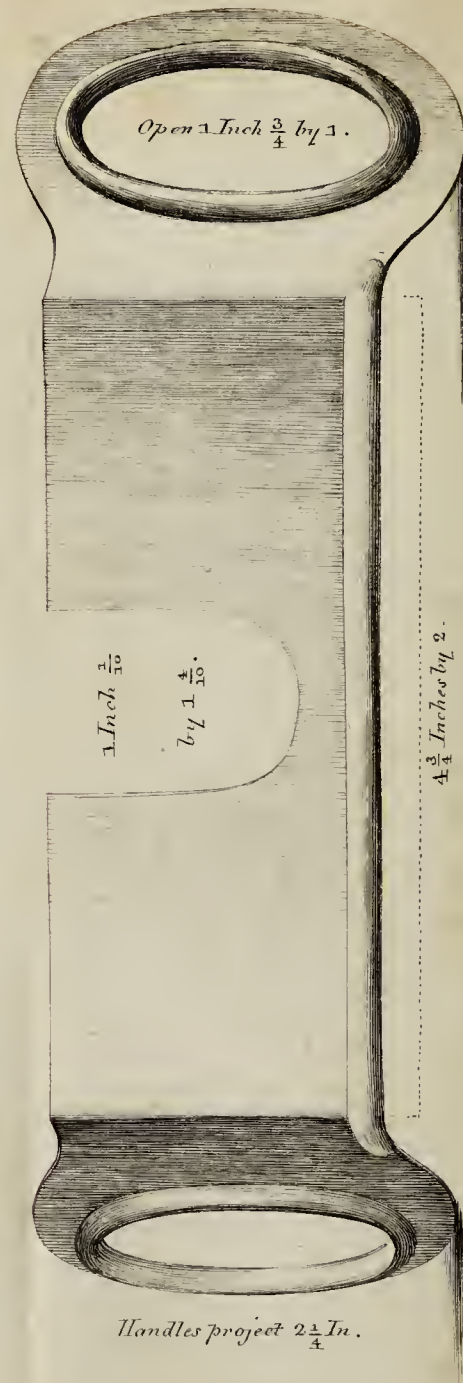
* The quicksilver in the bason of the barometer is 81 feet above the level of low water spring tides at Somerset House, London.



The Sizer.



The Retractor.



THE
LONDON MEDICAL REVIEW
AND
MAGAZINE.

VOL. II. N° VIII.—OCTOBER MDCCXCIX.

ACCOUNT OF NEW PUBLICATIONS.

ART. I. *Memoirs of the Medical Society of London.* Vol. V.
Octavo. pp. 476. JOHNSON, London. 1799. Price 9s. 6d.

TO those of our readers who are unacquainted with the nature of this Society, it may be necessary to premise, that it was instituted in the year 1773, in consequence of the liberality of Dr. Lettsom; who, animated with an ardent desire of promoting medical knowledge and the good of the public, presented its members with a spacious freehold house in Bolt Court, Fleet Street. The many valuable presents which have, from time to time, been made to this Society by several of its members, have contributed to the formation of an extensive and valuable library; the only one in this great town, to which medical men can resort to consult expensive and scarce publications. Independent of this considerable advantage, a still greater was in view at the time of its institution; namely, to give practitioners in the

VOL. II. N° VIII. I healing

healing art, frequent opportunities of meeting together, and conferring with each other concerning any difficult or uncommon cases which may have occurred; to communicate any new discoveries in medicine; and to read medical papers, which may tend to the advancement of the science.

The valuable and interesting stock of knowledge contained in the four volumes that have already appeared, and which are well known to the world, sufficiently point out the advantages that have been derived from such meetings. The present volume will not disappoint the expectations of the public: it contains some papers of high importance; yet we deem it our duty to observe, that its value would not have been diminished by the omission of several articles, which appear to us to contain neither practical improvements, nor any thing of novelty deserving the attention of practitioners in general.

For the *prize subjects* of this Society, we refer our readers to the account contained in our Review and Magazine for the month of May, p. 308.

The FIRST article in the volume before us, is an History of a Case of Hydrophobia. By WILLIAM GAITSKELL, Surgeon.

In this case, nine months elapsed from the time of the bite before any symptoms appeared. Two spoonfuls of oil were given by the mouth every two hours, and the body was rubbed with oil every four hours. The oil was given internally for twenty-four hours, but in consequence of the frictions producing great pain in the præcordia and throat, and violent spasms, they were soon omitted. No relief being obtained, the Ormskirk medicine was substituted, but the patient continued to get worse, and died on the eighth day from the appearance of hydrophobia.

2. *Funesta Passionis Iliacæ Historia, Partiumque morbosarum post Mortem Anatomia.* WICKENS HODGES, Chirurgus.

Upon opening the dead body, the jejunum was found in a gangrenous state, and the interior part of the colon and rectum

rectum was so contracted as not to admit the little finger. This case is written in Latin!

3. *A Case of Polypus Uteri.* By a Corresponding Member of the Society.

This case was communicated to the Society as a case of inverted uterus, but it appearing to the members present when it was read to be a true case of polypus, a letter was sent conveying their opinion. The death of the patient soon after confirmed that supposition. The case is therefore published as a serious warning to every member of the medical profession, to investigate the nature of diseases with all possible care in their early periods.

4. *Of certain morbid Affections of the Uterus.* By J. C. LETTSOM, M. D. &c.

Three cases are related, which terminated fatally; and the article concludes with some observations on uterine affections. The only circumstance worthy of attention is the following plan, which the author recommends before a scirrhus state of the uterus is actually confirmed; but how we are to judge of that state, we are not here informed: the symptoms enumerated by the Doctor, are by no means satisfactory.

“ I consider,” says Dr. Lettsom, “ that in all these cases there is more or less of inflammation present, and, in general, bleeding from the arm may be occasionally premised; the repetition and the quantity will depend upon the appearance of the blood, the degree of pain, the strength of the patient, and the state of the pulse: the two latter are, however, very deceptive, as the disease, in the first place, requires much confinement to the bed or couch, which soon induces a specious debility, and the pulse is generally weak, though frequently quick. But the evacuation I lay the most stress upon, is local or topical. I would advise from four to six leeches to be applied either a little above the os pubis, or to the perinæum, and these should be repeated every

every second or third day, if the pain and other symptoms of uterine affection persevere. In an instance lately under my care, besides three small bleedings by the arm, the patient had eight times six leeches applied as above directed. This plan, with other antiphlogistic means, preserved an excellent woman to society, who, otherwise, I have sufficient reason to conclude, would not at this time have been in existence.

“ If the patient should suffer extremely, the pain may be mitigated by injecting a solution of ten grains of opium into the vagina, or by a common anodyne clyster per rectum. From the mode of treatment I have suggested, it will obviously occur that the bowels should be kept laxative by the most emollient means, such as castor oil, mánna, magnesia, or rhubarb. Every stimulating cathartic should be avoided, and, in general, salts prove stimulant in this disease; lenient clysters may occasionally be injected, which act not only as a laxative, but likewise as an internal fofus. In like manner external fomentations have considerable benefit, and particularly after the application of leeches, the bleeding from which they tend to promote.

“ A blister may be applied to the lower region of the abdomen, as well as the perinæum; they are not apt to produce strangury, and tend to divert uterine inflammation.”

5. *Case of Hæmatocele, with an Account of the Efficacy of the Zanthoxylon.* By JOHN HARRIS, M. D. C. M. S. Kingston, Jamaica.

This memoir was communicated by Mr. Chamberlaine in 1793. The hæmatocele was punctured with a trochar, but, as all the blood was not evacuated, a seton was made, and the whole afterwards laid open. The patient's health was considerably reduced, and the wound not healing as could be wished for, by the common dressings, “ the powder of zanthoxylon was proposed as a dressing by Dr. Harris; who had before seen many pleasing instances of its antiseptic qualities, and had

had experienced its efficacy in a variety of obstinate and ill-conditioned ulcers. This was agreed to by Dr. Heney, who also was well acquainted with its utility.

“ Accordingly, a dosil of fine lint, armed with a digestive, was rolled in the powdered zanthoxylon, so as to take up as much as possible, and introduced into the cavity; this was done twice a day, after syringing with a strong infusion of the powdered zanthoxylon in boiling water: in two or three days the gentlemen were most agreeably surprised at the antiseptic power of that bark, for the fetor, which was before intolerable, was not only corrected, but the scirrhus sides of the tunica vaginalis became every day softer, and recovered their sensibility, discharging a laudable pus. The Peruvian bark, and wine, were freely prescribed, and the patient rapidly recovered, the testicle being reduced to its natural size and power.”

A botanical account of the zanthoxylon, with an accurate drawing of it, was sent by Dr. Harris to the Society, who have to lament its being captured by the enemy. In order, however, to supply its want, Mr. Chamberlaine has given the following account, in an appendix to the foregoing memoir.

“ The part used is a powder from the bark of the **root** of a tree, which, from specimens of the root now in my possession, and from every other document, appears to be that called Prickly Yellow Wood, or Yellow Hercules, much used for making the heading of sugar hogsheads, for bedsteads, and many other purposes, in Jamaica; it is a tall, straight tree, easily distinguishable from all others, in appearance not greatly dissimilar to our ash; the bark of the trunk is thickly beset with prickles, which, in the young trees, are pointed, but obtuse in the more aged. The wood is of a very bright yellow colour, whence its name *Ξανθοξύλον*. The flowers, which bear some resemblance to the cassia fistula, are succeeded by a pod, flattish, and

not much unlike in shape and size to a man's thumb; this pod is at first green, then red, and lastly turns black when ripe, and contains three or four compressed seeds.

“ It is called by Browne, (Nat. Hist. Jamaica, Sect. 4.) *Zanthoxylum foliis oblongis obovatis pinnatis et leviter crenatis; floribus racemosis, candice spinoso, ligno subcroceo.*

“ Dr. Harris, by a former ship, sent me a small box of the powder, which I have had opportunities of trying in three or four cases of very bad ulcers of the legs. In the first, I had attended the patient from January to July, with very little success; but, on changing the dressings for the powder of zanthoxylon, an almost immediate alteration took place: the wound was quite healed up by the end of September, and the patient has continued ever since perfectly well.

“ My second patient had been in an hospital six weeks in May and June, and was discharged cured, but the ulcer soon after broke out again, and continued to increase to the extent of five inches and a half in length, and four in breadth, which were its dimensions when I was first called to look at it: I ordered that it should be fomented, and, after washing it with milk and water, sprinkled the powder liberally all over the surface of the ulcer, and covered the whole with plantain leaves, rejecting all greasy ointments. This was persisted in twice a day, and a cataplasm of bread and milk laid over all at each dressing. Internally she took hydrarg. cum sulph. & nitr. āā gr xv, bis die. In a week the ulcer was less than half its former size, looked perfectly clean, and put on every appearance that could be wished for, and soon became perfectly well.

“ A poor woman had one of the worst ulcers I ever saw; she was very much reduced through want of sleep, from the excruciating pain caused by the ulcer, which she suffered night and day without intermission. I gave her some of the zanthoxylon powder, and instructed her how to use it.

In

In five days she walked to my house, and was able to come every morning to be dressed. I gave her no medicines, and enjoined no regimen, but the leg was perfectly healed, by the application of the zanthoxylon alone, in a month, and she now follows her business of a laundress, no vestige of any ulcer remaining except a little redness."

Dr. Harris has also favoured the Society with a letter from Dr. HENEY, of St. Davids, in the island of Jamaica, of which we subjoin an extract, containing his experience of *the efficacy of this bark in ulcers, fevers, dry belly-ache, and epilepsy:*

"For the purpose of more minutely ascertaining its efficacy, I confined the patients thus treated in the same place with others whose ulcers were of the same date and condition, and whom I treated with the lotions, dressings, and poultices in common use.

"In addition to the external use of the zanthoxylon, I ordered a couple of ounces of its bark to be boiled with the sarsaparilla, in lieu of the lignum vitæ, for their drink.

"The ulcers of my zanthoxylon patients in the course of a few days invariably threw off the sloughs, and other foul appearances, and exhibited healthy and well-coloured granulations beneath, discharging laudable and well-conditioned pus. Their co-patients, whether treated with mild emollient applications, or with stimulant dressings, exhibited, in their several situations, such slow appearances of amendment, as finally urged me to use the zanthoxylon to all.

"A negro woman, who had been affected for many years with several large phagædenic ulcers, from the mid-thigh to the ankle, was put under my care. A fœtid sanious discharge, together with fungous, and almost gangrenous excrescences, had given to the ulcerated surface so horrid an appearance and stench, as was highly disgusting to every one who saw or approached it, and intolerable to the wretched patient herself.

“ For six weeks after the first inspection of the ulcers, escharotics, warm stimulating dressings, tight bandages, were tried to no purpose. In place of these, I commenced the use of the zanthoxylon, by bathing the sores with the decoction, intermixing the powdered bark in the dressings, and giving the bark in decoction, in the place and proportion of the lignum guaiacum: the events answered my expectations: the discharge soon acquired the condition of laudable pus; well-coloured granulations, in the happiest form, appeared, and saturnine ointments finally effected the cure in eight weeks. Numberless were the experiments made by me and my assistant, subsequent to this, in similar ulcers, with equal success. In every instance, however, *of venereal taint in jaws*, or crab jaws, I found it ineffectual, prior to the use of mercurials.

“ I some time ago mentioned to you a few successful experiments, made with a view to determine its antifebrile qualities, by administering it in the same scope and indication as the Peruvian bark. Repeated trials have, however, since that period, convinced me it is much more inactive than that celebrated febrifuge, unless its virtues are sharpened by the addition of some neutral salt, or alkaline: then it really exhibits virtues little inferior to the China-China, and is unattended with the inconveniences usually experienced from the latter. This I account for by supposing its resinous parts to be rendered more readily miscible with the aqueous juices by the addition of the salt.

“ Another most singular quality the zanthoxylon possesses in an eminent degree, which, I presume, you are unacquainted with, and to the knowledge of which I was accidentally led. A short account of the discovery will best explain it, and, at the same time, indirectly argues this salutary plant not to be a native of Jamaica.

“ Mr. Crosdale purchased two negro wenches in the beginning of the present year; the younger of whom, at different

ferent times since, has been afflicted with a dry belly-ache, or colica pictonum. About two months ago she was seized with it in so dreadful a degree, that every effort to remove the spasmodic constriction of the bowels, and procure some motions, proved ineffectual. To no purpose were emollient fomentations, anodyne or cathartic glysters, mild and drastic purges, castor oil, and, ultimately, blisters to the abdomen applied. That horrid symptom, a *vomiting of the excrements*, commenced, and banished every ray of hope. In this situation she desired to have her sister with her, who, on seeing her deplorable condition, signified a wish of giving a nostrum communicated to her by their mother, and employed to cure herself, on a similar occasion, in Africa. I readily complied with the request. In the course of two hours, she returned from the woods with the root and flowers of some plant, pounded together in a calabash. Two spoonfuls of the expressed juice of this she gave her sister twice, at an interval of two hours each. The first effect of this was a tranquil profound sleep of twelve hours duration, during which the pulse and breathing gradually returned to the natural state; after this, all sense of pain, and every bad symptom, disappeared, and no other inconvenience did she experience, save debility and slight soreness, from the passing of the purgative medicine, which came away especially during the course of the following day. The sister was observed to boil the ingredients (after expressing the juice) in a large quantity of water, and give it on the following day as common drink. No reward or menace could induce her to discover the plants, until stratagem brought it to light. We induced another negro to dissemble a similar complaint, and prevailed with the wench to seek for, and prepare the same cure; in complying with this request we had her so narrowly watched, as to discover the secret to be the fresh root of the zanthoxylon in its infant state, intermixed with the saffron-coloured flower of
the

the wild sage; which last, I have since found to contribute nothing to its virtues. Having procured some of the sappy and smallest roots of the young trees, and expressed the juice, I began the experiment of its qualities on myself at tea-spoonful doses. From the first of these I found no other effects than an unusual flow of spirits. By continuing the dose, drowsiness, nausea, head-ache, and, at length, sleep, ensued; from which I however awoke next morning perfectly refreshed, and had three copious easy motions. I preserved some of the juice with rum, and some with syrup. These preparations, as well as the juice, I have frequently since that period administered in complaints of the bowels, (so frequent among the African race and their progeny,) with every wished-for success. On the estate of Mrs. O'Bryan, an old man, of eighty years, was lately seized with convulsive fits every hour, in every character similar to epilepsy, which continued without intermission twenty-four hours. To him, on being sent for, I immediately gave a wine-glassful of the juice preserved in rum; the fit which succeeded the first glass was unattended with strong convulsions, and the second was little else than a comatose state; after which, a sound sleep of ten hours removed every appearance of disorder except lassitude.

“ This last-mentioned antispasmodic virtue, the Zanthoxylon loses by being dried and powdered, its narcotic qualities being dissipated with the moisture of the plant.”

The 6th article in this volume is an history, by Mr. ERRATT, of symptoms arising from calculus in the urinary bladder, and the formation of abscesses or vesiculæ of the kidney, which contained thick pus.

Upon sounding the patient, the calculus could not be detected, and the symptoms were treated as arising from local morbid irritability. The appearances on dissection are given; but the account does not contain any remark of importance.

7. *On the Application of Spirit of Wine to Burns, Scalds, &c.*

By THOMAS PARKINSON, Surgeon at Leicester.

The good effects of this application are, by the author, attributed to the degree of cold generated by evaporation. The process consists in covering the parts with bladder of the greatest tenuity, which is continually to be kept moistened, for twenty-four or thirty hours, with alcohol, or highly rectified spirits of wine. This treatment has not so much “novelty” to recommend it as Mr. P. imagines.

Five cases are detailed, of which we shall insert the two following, the others being very similar:

“*Case 2.*—A young man, by trade a blacksmith, having occasion to go with a lighted candle to a cupboard where gunpowder was placed, incautiously set fire to this combustible substance; a considerable explosion took place, which instantly drove the window of the room out of its frame, whilst he was scorched in a terrible manner. Having his coat off, his shirt immediately took fire, and contributed, by its adhesion, to aggravate the injury very much: his face, neck, and hands, suffered greatly; his eye-brows, eye-lashes, and the hair upon his head, were totally destroyed; whilst the lobes of the ears and adjacent parts were burned to a cinder. The accident happened at the distance of more than two miles from Leicester; but an assistant of mine, as I was at that moment engaged in a case of midwifery, hastened to the aid of the poor man, carrying with him a quart of the spirit of wine, with a large pot of common white cerate; and he was soon after followed by myself. I found in some parts the sloughs were of considerable depth; and, upon the whole, such was the degree and extent of the injury, as to render the human form a *miserable spectacle* indeed.

“The parts injured by the accident were first of all washed with warm milk and water; they were then covered with linen, on which was spread some of the cerate; and,
on

on the outside of this application, spirit of wine was continually applied, so as to procure a constant evaporation for twenty-four hours. This soon produced ease, with considerable abatement of inflammation. The remedy, however, was persisted in, until the evening of the third day; for it was not before that time that perfect ease was obtained; during which period two quarts of spirit had been consumed. Those sloughs which appeared to be deep, were then covered with soft digestive; a cooling purge was given him, and wax and oil completed the cure. The injury appeared at first to be of such magnitude, that I was apprehensive much deformity, or defacement, must have been the unavoidable consequence of it; but, much to my satisfaction, the parts healed without any further inconvenience to my patient, than that of leaving some well-formed cicatrices behind them.

“ *Case 5.*—A servant boy had his leg very much scalded by boiling water poured upon it by accident. The part was immediately much inflamed, and blisters appeared upon its surface. A saturnine remedy was applied to it, and the next morning I saw him; when the inflammation was considerably increased, accompanied with pain. The injured part was immediately covered with a moistened bladder, and spirit of wine applied to the surface of it, in the manner I have recommended, for half an hour only. This proved a sufficient time to procure ease, to remove inflammation, and to make way for the application of wax and oil, under which, without any further trouble, the injured part healed.

“ I could add many other instances of the admirable effects of spirit of wine, as an external remedy, under a state of evaporation, in inflamed eyes, and injuries incurred by burning and scalding substances applied to the human body; but these, I trust, will be thought, by any candid person, of sufficient import to engage his attention.”

8. *An Account of the lithontriptic Power observed in the muriatic Acid.* By Mr. COPLAND.

Several persons having experienced relief in gravelly complaints by a quack medicine, Mr. C. was induced to see it, and upon examination found it to be the muriatic acid. It was exhibited with success in several instances; the urine always depositing a quantity of sand and gravel after its exhibition. The dose is about thirty drops, three times a-day.

9. *Experiments on the external Use of tartarised Antimony.* By BENJAMIN HUTCHINSON, Member of the Corporation of Surgeons, London.

In order to ascertain whether or not emetic tartar can be externally absorbed into the system, and whether any material effects are produced from such absorption, "I repeated," says Mr. Hutchinson, "the experiments which are related by Mr. Sherwin, in the second volume of the Memoirs of the Medical Society of London, on a young lady and gentleman, by rubbing into the palms of the hands at bedtime, five grains of emetic tartar, with a few drops of water. It produced no sensible effect on myself till towards the morning, when a gentle diaphoresis was diffused over my whole body: the gentleman did not perceive any alteration, but the lady had evidently a SLIGHT NAUSEA, and a very gentle diaphoresis. We repeated the experiment several successive nights, and we all perceived a glow on the body, and the lady remarked that she had never slept so well in her life, as when under the influence of the emetic tartar. We now varied the mode of introducing the medicine, by dissolving, or rather mixing, one drachm of it in two ounces of water. On rubbing into the palms of my hands eighty drops of this saturated solution, no very sensible effect was produced on myself; but the lady and gentleman both slightly perspired, and both experienced an unusual propensity to sleep; an effect, which it does not appear that either Mr. Sherwin, or any of the other experimentalists, have mentioned. I increased
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the quantity the succeeding night, and doubt not but I rubbed into the palms of my hands the quantity of fifteen or twenty grains; in consequence of which I awoke in the night with an increased full pulse, and great heat, succeeded by profuse perspiration; afterwards there came on a great and invincible disposition to sleep, an evident increase in the secretion of urine, but no material change in the intestinal system. These experiments were repeated several successive nights, when, being convinced that the emetic tartar was taken into the system, and conceiving very flattering hopes from this mode of introduction in the treatment of diseases, I began by making the experiment on some patients then under my care.—*The first case* which I have to relate is that of Mary Hill, a farmer's daughter of Halam, in this neighbourhood, seventeen years of age: she had been troubled with a tertian ague four or five months, which had resisted the powers of bark, of different febrifuges, and of the arsenical solution, which I had been administering some length of time. I was not without hope that the desired effect might be produced by the habit being well saturated with emetic tartar, and had the more confidence in this expectation, from the concurring opinion of a medical friend, whose sentiments I shall always regard with the greatest deference and respect. This patient began by rubbing into her hands and feet fifteen grains of emetic tartar night and morning. The experiment was commenced on the evening preceding the expected return of the paroxysm, and, upon inquiring how she felt the next morning, she complained that she had burned and sweated excessively, and that the medicine had given her so unusual a sensation, that she requested she might not be obliged to persevere; but, on pointing out the necessity of perseverance, she repeated the frictions according to my directions, and the succeeding paroxysms, in some degree, diminished. After using it three days, she again expressed a wish to desist, as she complained that it teased

teased her with a constant sickness; however, with much persuasion, she persevered for ten days, when her ague totally left her. She could with difficulty walk across the room for a month after her complaint was removed, partly from excessive debility, but more particularly from the soreness which the friction had occasioned in her feet. I now gave her the bark, which soon restored her to her former health.—The next case is that of a young gentleman, who for some years back had been troubled with a violent rheumatic pain in his right arm, extending to his shoulder; he had tried the whole class of anti-rheumatics, as guaiacum, Dr. James's powder, analeptic pills, mercury, &c. &c. without any good effect: I therefore resolved to give the emetic tartar a fair trial, and prescribed a scruple to be rubbed into the arm every night, rather below the part affected, in the course of the absorbents: from the first friction he experienced considerable heat, stupors, a quickened pulse, and profuse diaphoresis. The third friction raised a few small pustules, in consequence of which it was necessary to omit its use a few days, when again persevering, in the space of ten days his pain entirely left him. The concurring testimony of my experiments seems by no means requisite to establish the simple fact, that emetic tartar can be received into the system by the cutaneous absorbents: the only doubt which can possibly exist is, whether or no its action and effects from external introduction are equal, or superior, to its action and effects when the system receives it by the stomach?"

10. *Some Account of a Species of Phthisis Pulmonalis, peculiar to Persons employed in pointing Needles in the Needle Manufacture.* By JAMES JOHNSTON, M. D. of Worcester.

There is nothing singular in the account given of *this* species of phthisis. Dr. Johnston recommends a crape hood, or

gauze helmet, to receive the head and rest on the shoulders, which would prevent the stony and metallic particles of dust from entering the lungs ; and that, instead of cooling their hands and the heated needles with their saliva, they should dip them into a vessel of cold water.

11. *On the Poison of Fish.* By EDWARD THOMAS, M. D.

Member of the College of Physicians.

The poisonous effect of some fish in the West Indies has long been known to the inhabitants of that climate ; but no satisfactory account has ever been given of its nature or origin, although various conjectures have been offered. With a view to point out the importance of the subject, and to stimulate other inquisitive minds to inquiry, Dr. Thomas has communicated this article, of which the following is the substance. The cause, by some persons, is imputed to the fish feeding on copperas banks ; but, according to Dr. T. the existence of such banks has never been proved.

“ That it arises however from their food, is strongly corroborated by several circumstances ; but what that food is, remains yet to be discovered. It is a well-known fact, that the land crab, *cancer terrestris*, when taken near manchineel trees, is found, particularly in dry seasons, at one time safe, at another poisonous, from feeding on the bark or leaves of that tree, in lieu of other nourishment. The mountain crab is likewise dangerous at particular times of the year, from a similar cause. The inhabitants are so sensible of this, that they never eat them unless they have been kept in coops a fortnight or three weeks, and purged with the physic nut leaves. A convincing proof that amphibia may acquire this noxious quality from their food, without inconvenience or danger to themselves.

“ When taken off the hook, if the precaution is used to gut and salt them immediately, they seldom or never create any disorder.

“ The fish most to be dreaded are, the barracuta, yellow-bill sprat, cavallee, rock-fish, king-fish, smooth bottle-fish, and lobster.

“ The barracuta (*perca major*) of Brown, is so often poisonous, that it is seldom touched, although introduced at table, and by some accounted a very delicate dish. It is a very voracious fish, and has been sometimes known to attack people who were bathing in the sea. A less species, called umbla minor, is mentioned by Sloane, who says, that according to its feeding on venomous or not venomous food, it is wholesome or poisonous to those that eat it; also noxious in some seasons of the year, and in some places, and innocent in others, I suppose according to its nourishment, by which, now and then, it acquires so much poison, as to kill immediately.

“ The yellow-bill sprat, or windward sprat, not noticed by Sloane, Catesby, or Brown, is known from the black-bill (*harenga minor*) by the minuteness of its scales, and by a yellow spot on each side of its head. It is always to be dreaded, and therefore is only purchased by the lower class of inhabitants, or by people of colour.

“ The cavallee (*scamber*) of Brown. Three varieties of this fish are brought to market; the bottle-nose, amber, and green-back. The two first frequently prove poisonous, the last is always innocent.

“ The *perca marina* of Catesby, or rock-fish. This fish, Catesby says, has the worst character for its poisonous quality of any other among the Bahama islands, but whether they are eatable from any particular places, I know not, many of these poisonous fishes being not so when caught in some places; of which the inhabitants can give a near guess, but sometimes they are miserably mistaken.

“ The king-fish (*xiphias*) of Brown, derives its English name from its superior delicacy, but, notwithstanding its high reputation, proves now and then poisonous.

“ The smooth bottle fish (*ostracion glabellum*,) found in Kingston harbour, Jamaica, in one instance killed in half an hour, producing general coldness, nausea, supineness, and death: by use of vomits, timely administered, some who had eaten it recovered. Dr. Wright attended the patients, and stated the fact to Mr. Home in his weekly return.

“ The sea-lobster (*astacus*) of Brown, though classed among insects, I have thought proper to mention here, as it is at times equally dangerous.

“ The consequences attending this poison are in general very alarming, and in many instances fatal. A negro of Mrs. Deming’s, of St. Kitt’s, died in the most excruciating agonies from eating the yellow-bill sprat; another negro on Borryau’s estate, whom Dr. Stevens attended, died from the same cause.

“ Some stomachs seem to be more susceptible of the action of the poison than others, and feel the effects of it almost immediately: the symptoms in others do not appear until two, three, or four hours after the accident, and some escape their violence altogether. A party of gentlemen marooning some years ago at Friars Bay, dined on cavallee; all who partook of it were poisoned, some sooner, some later than others; and, if my memory does not fail me, two out of the number died in consequence of it, although not immediately. One gentleman, who had drank a large quantity of Madeira wine, felt no other ill effects from what he had eaten, than a slight swelling in his knees. This precaution, however, cannot always be depended upon; as a friend of mine was severely poisoned by a lobster, notwithstanding he had fortified his stomach with a bottle of old Madeira and a bottle of cherry-brandy.

“ The usual symptoms of fish-poison are, cardialgia, nausea, severe vomiting and purging, tormina, cold sweats, fainting, and in some vertigo: the face in the mean time becomes highly flushed, and the eyes inflamed, attended
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with a burning heat and spasmodic twitches, which particularly affect the eyes, the sufferers often complaining that they are ready to start from their sockets. The burning which is felt in the face and eyes is extended to the palms of the hands, the tips of the fingers, and over the whole body; sometimes accompanied, and sometimes succeeded, by a miliary eruption, or by an efflorescence resembling the bite of a bug, but more extensive. The pulse, for the most part, is hard and frequent. This ardor of the skin, and a prickling in the hands and nose when immersed in cold water, are almost invariable symptoms of fish-poison, and enable the practitioner to decide with confidence on the nature of the disease.

“ The neck of the bladder, urethra, and sphincter ani, appear to sympathize with the skin, as the patients often complain of a like ardor in those parts, with a difficulty of making water, strangury, and afflicting tenesmus.

“ When the violence of the disorder is somewhat abated, the cuticle begins to scale off in various parts of the body. In one patient whom I attended, a miliary efflorescence accompanied the ardor of the skin, without any evident desquamation.

“ The last and most tedious symptom, which may be rather considered as secondary, is an acute and shooting pain in the articulations of the knee, wrist, ankles, and sometimes in the cylindrical bones, with more or less swelling. It is distressing at intervals for years after every other train of the disorder has disappeared, and is not unfrequently attended with œdema.”

This is the ordinary course of the disorder, collected from a variety of cases which came under Dr. Thomas's immediate inspection, all of which terminated happily.

“ In the cure of this disorder,” the author continues, “ two purposes are clearly pointed out, viz. to procure a discharge of the poison as speedily as possible, and to re-

move or alleviate the effects that result from it. The first can only be effected by medicines whose operation is quick and effective, and of all those, I think, a preference should be given to the vitriolated zinc; which, if timely administered, is alone sufficient to obviate the dangerous tendency of the poison. But, as it is difficult to ascertain whether the whole of the poison has been removed, I consider it always most prudent to give a solution of the vitriolated natron, or some other salt, after the operation of the emetic, and continue it as long as the different circumstances point out its necessity. This method is practicable in robust constitutions, where evacuations may be carried to almost any lengths; but, in weak, delicate habits, the vomiting and purging are so severe, and debilitate the patients so much, that you are frequently under the necessity of prescribing anodynes, before you are certain that the stomach and intestines have been freed from their noxious contents: the interval of ease they procure invigorates the system, and enables the stomach to retain such medicines as are proper to remove the poison.

“ To effect the second intention, no positive rule can be laid down, as you are to be directed by the nature and violence of the symptoms. After due evacuations, if the symptoms of cholera still continue, which frequently happens, they should be checked by anodynes, cordials, and glysters of water-gruel or starch, with or without laudanum. A gentle moisture of the skin may then be promoted by the use of mild diaphoretics; and here none answers better than the common Dover’s powder; the ardor of the skin is powerfully relieved by this medicine. A liberal use of some mucilaginous drink should be recommended as long as the strangury remains. The pains of the articulations are sometimes very obstinate, and yield to nothing but time. Relief may nevertheless be procured by decoctions of guaiacum and sarsaparilla, by wrapping the parts in flannel, and sometimes

sometimes from the warm, and sometimes from the cold bath. From the beneficial effects of old Madeira in the one instance related, I think it would not be amiss to recommend a liberal use of it to such as were under a suspicion of being poisoned, where no medicine could be procured, or where the aversion to medicines could not be overcome; but it is rather a dangerous experiment. The oil of the bigonia is warmly recommended by some, and frequently administered by negroes to people of their colour, but with what success I cannot say, as I never saw it used."

12. *Case of Deposition of Mercury upon the Bones.* By
FRANCIS RIGBY BRODBELT.

The patient died while labouring under the venereal disease, and was dissected by the author; who, having finished his intended dissections, took out the bones and ligaments of the larynx. They were left all night, (in the public dissecting-room it is presumed,) and in the morning were found *covered* with globules of mercury. On examining the os hyoides, says Mr. Brodbelt, "I found it very much *covered* with quicksilver, as were likewise the thyroid and cricoid cartilages; some particles were also discovered *upon* the trachea." On further investigation the author found, "that the metal had been deposited *upon* every bone in the body;" but the globules of the larynx were the largest.

He is of opinion, that the mercury "was deposited *upon* the bones by the exhalent arteries;" and does not hesitate to declare that the causes of the globules of mercury being much larger *upon* the larynx, were, its proximity to the heart, and its being so plentifully supplied with blood.

Several of the bones were sawed through, and carefully examined; but no mercury could be discovered in their *internal* substances.

The silver medal was voted to Mr. Brodbelt, for this mysterious communication!!!

A.D.

(To be resumed next month.)

ART. II. *Practical Observations on the Cure of Wounds and Ulcers on the Legs, without Rest; illustrated with Cases.* By THOMAS WHATELY, Member of the Corporation of Surgeons of London. Octavo, pp. 352. CADELL and DAVIES, London. 1799. Price 7s.

IN this volume Mr. Whately has given the testimony of “twenty years” experience in favour of the treatment of ulcerated legs by compression with a roller, and has brought forward near two hundred cases to prove the success of this practice. In these cases “very little variety of dressing was used; the cure was almost always trusted principally to the pressure made on the limb, under the exceptions particularly specified. My success,” says Mr. W. “has been so uniform, that I cannot but be anxious to see this practice become established, and generally followed. Nothing but a conviction that in promoting this end I am really doing an important service to my fellow creatures, could have induced me to appear before the tribunal of the public, conscious as I am of my incompetency as a writer. But may I not hope that the plain tale of a practical man will be heard, though not told with the graces of elegant language?”

Mr. W. very properly observes, that in order to produce the full effect of bandages, “surgeons must condescend to apply them with their own hands. The clumsy and ineffectual manner in which this business is too frequently done, can never be expected to produce the desired effect.” But if the necessary pains be taken, Mr. W. thinks “such effects will uniformly follow, as must convince the unprejudiced mind, that to have recourse to the operation of tying varicose veins, and the application of a great variety of remedies, can be *very rarely*, most probably *never* necessary. All such cases as are described by Mr. Home to be cured by this operation, have readily yielded under the proper

proper management of pressure alone." Mr. W. notices Mr. Baynton's pamphlet; but adds, "Every thing that is there said on the efficacy of his method may be considered as confirming the doctrine laid down in the following pages. His mode however of making the pressure with adhesive plaster appears to me inconvenient, and on several accounts objectionable. I have no doubt but that the proper application of compresses and flannel rollers, would, in every case recorded by him, have produced similar good effects. The instances of success by his method, after the supposed failure by the roller, I can only attribute to this, that the pressure made with the plasters was applied by his own hands, whereas that with the roller was probably, as is usual, so made that the effect intended by it could not possibly have been obtained. No surgeon, who will not be at the trouble of applying them himself, can be a judge of what may be effected by the proper management of the roller and compresses."

In the first chapter the author inquires why wounds and ulcers of the legs are more difficult of cure than those in other parts of the body. He next divides all ulcers into *local* and *constitutional*, and proceeds to give directions for the management of each class. - In both, he depends chiefly on the tight bandage and compresses. Violent wounds on the legs, he asserts, should be treated in the same way, and the free use of the limb as soon as the first acute inflammation is over, and proper digestion takes place. But we are persuaded this rule is not to be admitted, without more exceptions than Mr. Whately has stated. It is certainly true, that many recent wounds will heal under the use of the limb, provided it be properly supported by bandage; but there are many cases, particularly of gun-shot wounds, by which the muscles have been torn, or otherwise injured, where the free use of the limb will certainly retard the cure, if it be not very far advanced.

Many useful observations are interspersed in the five first chapters, pointing out such variations as it is necessary to adopt in the different states both of local and constitutional ulcers, and under the accidental occurrences which occasionally supervene. In the sixth chapter the author treats particularly on a peculiar kind of erysipelatous inflammation with which the affected limb is sometimes attacked.

“ This,” says Mr. W. “ usually begins by a cold fit, the patient having been previously for the most part in perfect health, and the wound or ulcer in its usual state. It comes on in all habits, at all ages, and at all seasons of the year; but more frequently in the middle and latter periods of life than earlier, and during the cold and wet weather of winter than in the warm and dry months of summer. I have also reason to believe, that those who have occasionally taken mercurials, or purgatives of any kind, are particularly liable to it. The shivering often lasts two or three hours, or longer, and is succeeded by a hot fit, and the other febrile symptoms which usually accompany it. An inflammation then suddenly seizes on the cutis of the diseased leg; generally making its first appearance on that part of it which is adjacent to the ulcer or wound, but sometimes on a sound part at a considerable distance from the sore. If the inflammation does not shew itself as soon as the cold fit is over, (which it most frequently does,) it seldom fails of discovering itself within a few hours afterwards. In some cases, however, it does not appear till twelve or twenty-four hours afterwards; and there are some rare instances, in which there will be an interval of two or three days between the cold fit and the first appearance of the inflammation. As soon as the inflammation is completed, all the feverish symptoms abate, and at length disappear; but as long as this is delayed, the fever continues; nor does its violence in the least abate till the inflammation takes place.

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“ A considerable portion of the skin is inflamed generally on the first attack. The disease then spreads daily over it; and, in many cases, the surface of the whole limb is at length affected. This inflammation is mostly confined to the leg and foot; but I have observed that, in some instances, it has extended itself to the thigh, and even to the groin and scrotum. Like many other acute diseases, its continuance is limited to a certain period of time, within which it sets all the means of opposition at defiance. In the slighter cases, it terminates in six or seven days; in the more violent ones, in ten or twelve; but it seldom continues more than a fortnight in any case, unless it be accompanied with such a phlegmonous inflammation as terminates in a suppuration.

“ The effects of this inflammation are very different. In some instances it will go off (after having continued its period) without doing any mischief whatever; in others, watery vesications, sometimes attended with livid spots and an actual sphacelus of the parts, will accompany its progress along the skin. Sometimes the sore will ulcerate and increase in size; at other times it will remain stationary. In many cases there will be a considerable inflammation along the course of the lymphatics of the leg and thigh, quite up to the groin, where the lymphatic glands will inflame, and sometimes suppurate.

“ Although this disease be for the most part truly erysipelatous, yet there are some cases in which a considerable degree of phlegmonous inflammation, followed by suppurations, is joined with it. These suppurations, however, differ in some respects from common collections of matter. The partial tension, and tendency to suppuration, are in many cases not distinctly marked until the erysipelas begins to subside, or its period is nearly completed; in others they will appear much earlier. Not long after these take place, a circumscribed fluctuation is visible; and when the
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pus has been discharged, and some progress is made in the cure, another abscess will sometimes appear in an adjoining part, which till then did not shew itself. When this shall have suppurated, others in like manner will in some cases follow. The number and situation of these abscesses are very different. Sometimes there will be only one or two of them, and the disease will terminate without forming any more; at other times, though very rarely, there will be a succession of them for a month or two after the commencement of the erysipelas. Many of them appear to be suppurations of the lymphatics, their situation being often confined to the course of these vessels; in other instances they appear in a line, one above another, extending from the leg to the thigh.

“ If the first attack be very slight, it is scarcely necessary to do any thing; the inflammation will soon cease of itself. But if it be very severe, and especially if it be combined with phlegmon, we must use our utmost endeavours to moderate its violence. Even when the erysipelatous inflammation predominates we may sometimes bleed, promote gentle evacuations, and enjoin a cool and abstemious diet; but these means should never be recommended without keeping in view, that in every erysipelas the utmost caution is required in the use of evacuants. Moreover, when the inflammation is more purely erysipelatous, and is accompanied with a tendency to sphacelus, and symptoms of great debility in the habit, we must pursue an utterly different method; wine, bark, and opium, must be given, as the necessity of the case may require; if the case be a violent one, these articles must be repeatedly administered in large quantities.

“ As an external application, an emollient poultice of bread and milk, or linseed meal, is the easiest and the most serviceable that can be used.

“ It must appear to every one, that tight bandages would

would be highly improper, during the continuance of this inflammation. If they have been used previous to the attack of the cold fit, they must be discontinued immediately upon the occurrence of that circumstance; otherwise, we shall keep the fever in the habit, and risk a deposition of the inflammation on some part of the body of the utmost consequence in the system. But when the disease is completely over, we ought to finish the cure of the ulcers by the use of pressure, as in any other case."

The seventh chapter treats on carious ulcers. From this we select the following remarks :

" Carious ulcers, whether they be local or constitutional, will, under certain affections, require some things in the management of them very dissimilar to our treatment of ulcers of the soft parts. Dead and irritating exfoliations must for instance be removed by manual operation, whenever they occur in situations from which they are not spontaneously extricated. But a diseased bone does not necessarily require, in other respects, a method of cure different from that which we practise when the soft parts are affected with the same disease.

" It has, I think, been already proved, that the chief obstacle to the cure of common ulcers of the lower extremities arises from certain effects produced on the vessels, in consequence of their dependent situation. The like effects have we to guard against, in the treatment of carious ulcers on the legs. The vessels are similarly affected in these cases, by the erect position of the body. The horizontal posture, or pressure, must be adopted, in order to effectuate a cure. But it should be remembered, that this is not always the case; carious ulcers being subject to an excess of inflammation, to temporary ulcerations and gangrenes. During the continuance of such symptoms, we should on no account make use of pressure: the limb must be kept in a horizontal posture, and emollient poultices,

&c.

&c. must be applied and persisted in till these symptoms disappear.

“ In the treatment of carious ulcers on the legs, the attention of the surgeon is frequently called to the process of exfoliation. This process is greatly promoted by pressure, and the free exercise of the limb. These should therefore be used, when they are not interdicted by particular circumstances; for however strange it may appear to some, there are no means more serviceable than these in assisting nature to get rid of an unsound part of a bone.

“ In conformity to these ideas, I have in no case whatever made use of any other artificial means but those above-mentioned, in order to promote an exfoliation. We may bore and mangle a diseased bone, or puncture and tear up a slough on the soft parts, but, after all, the process of separation in both cases is altogether the work of nature; and if art attempt to force the effect by such harsh means, more harm than good may be the result; the gradual operations of nature may be interrupted, and the intended effect be retarded by violent treatment.

“ Carious bones are frequently covered by the diseased integuments, and of course they are not always visible; in these cases we must, from time to time, introduce a probe into the ulcer, and press it firmly downwards against the bone. If no exfoliation have taken place, the resistance from the bone will in general be such as to convince us that no part of it has as yet separated from the rest.

“ There are however some instances of exfoliation, in which the separation cannot be so certainly ascertained: as for example, where the exfoliated piece is of an irregular and forked shape, and is so entangled with the processes of the sound part of the bone, as to be, as it were, linked with them.

“ If the exfoliation seem to be delayed longer than the usual time, (which, when the ulcer is properly treated, rarely exceeds two or three months,) we may conclude that

the separation of the diseased bone is completed, but that it is linked with the adjoining sound bone in such a manner as to prevent its yielding to the pressure of the probe. The diseased bone being frequently covered by the integuments, I would in that case advise (after the time above-mentioned has elapsed) their being destroyed by a caustic, in order to expose the bone, and to enable us to apply a levator to it: hereby we shall ascertain its real situation.

“ In some cases I have been enabled to disengage small portions of the tibia from the sound bone with very little force; but where considerable portions of bone were to be removed, greater force was necessary: for this purpose I have been obliged to use a strong pair of pincers.”

Mr. Whately has illustrated these observations by several cases; one of which has already appeared in the second volume of the *Medical Communications*, and another in the first volume of the *Medical Memoirs*. It will therefore be unnecessary to insert them here.

The cases of common ulcers are, as we have before hinted, very numerous; but they are such as are every day seen; and are only introduced with great brevity, as confirmations of the propriety of the mode of practice Mr. W. recommends. They however enable him to speak confidently of the safety with which these ulcers may in this way be healed, in almost all cases, even though they have been of some years continuance.

Mr. W. confesses, p. 156, that he has met with some cases in which he could not succeed without confining his patient to his bed; but the number of these is small indeed, compared with those in which the opposite method was adopted.

Some rules are given in the tenth chapter, for preventing relapses after the cure of ulcers on the legs; but for these we must refer to the book itself.

It is proper we should state, that the profits arising from
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the sale of this work ("should any arise from it,") will be appropriated to the fund for the relief of the widows and orphans of medical men. R.

ART. III. *Philosophical Transactions of the Royal Society, for 1799. Part I.*

(Concluded from page 63.)

IV. *Some Additions to a Paper, read in 1790, on the Subject of a Child with a double Head.* By EVERARD HOME, Esq. F. R. S.

IN the LXXXth volume of the *Philosophical Transactions* is a curious paper by Mr. Home, giving a description of an East Indian child with a double head; who died at the age of above four years, from the bite of a *cobra de capello*. The extraordinary circumstances of this case will justify our recapitulating the chief of the facts concerning it, which were stated by Mr. Home and others in 1790.

Three figures, representing the remarkable appearances of the child, may be seen in the *Philosophical Transactions* and in the first volume of Dr. Simmons's *Medical Facts and Observations*. The skull itself was deposited in Mr. John Hunter's anatomical museum.

This child is said to have been born in the province of Bengal. At the time of its birth, the midwife, affrighted at its monstrous appearance, threw it into the fire; where it lay sufficiently long to have one of its eyes and ears considerably burned.

Its body was naturally formed, but the head seemed double; there being, besides the proper head of the child, another of the same size, and to appearance almost equally perfect, attached to its upper part. This upper head was inverted, so that they seemed to be two separate heads united together by a firm adhesion between their crowns, but

but without any indentation at their union, there being a smooth continued surface from the one to the other. The face of the upper head was not over that of the lower, but had an oblique position, the centre of it being immediately above the right eye.

When the child was six months old, both of the heads were covered with black hair in nearly the same quantity. At this period the skulls seemed to have been completely ossified, except a small space between the ossa frontis of the upper one, like a fontanelle.

Observations on the superior or inverted Head.

No pulsation could be felt in the situation of the temporal arteries, but the superficial veins were very evident.

The neck was about two inches long, and the upper part of it terminated in a rounded soft tumour, like a small peach.

One of the eyes had been considerably hurt by the fire, but the other appeared perfect, having its full quantity of motion; but the eye-lids were not thrown into action by any thing suddenly approaching the eye; nor was the iris at those times in the least affected, but, when suddenly exposed to a strong light, it contracted, although not so much as it usually does. The eyes did not correspond in their motions with those of the lower head; but appeared often to be open when the child was asleep, and shut when it was awake.

The external ears were very imperfect, being only loose folds of skin, and one of them mutilated by having been burnt. There did not appear to be any passage leading into the bone which contains the organ of hearing.

The lower jaw was rather smaller than it naturally should be, but was capable of motion. The tongue was small, flat, and adhered firmly to the lower jaw, except for about half an inch at the tip, which was loose. The gums in
both

both jaws had the natural appearance; but no teeth were to be seen either in this head or the other.

The internal surfaces of the nose and mouth were lubricated by the natural secretions, a considerable quantity of mucus and saliva being occasionally discharged from them.

The muscles of the face were evidently possessed of powers of action, and the whole head had a good deal of sensibility; since violence to the skin produced the distortion expressive of crying, and thrusting the finger into the mouth made it shew strong marks of pain. When the mother's nipple was applied to the mouth, the lips attempted to suck.

The natural head had nothing uncommon in its appearance; the eyes were attentive to objects, and its mouth sucked the breast vigorously. Its body was emaciated.

The parents of the child were poor, and carried it about the streets of Calcutta as a curiosity to be seen for money; and, to prevent its being exposed to the populace, they kept it constantly covered up, which was considered as the cause of its being emaciated and unhealthy.

This child's death happened (there is good reason to believe) in the year 1785. At that period, the appearances differed in many respects from those taken notice of when the child was only six months old.

The burnt ear had so much recovered itself as only to have lost about one fourth part of the loose pendulous flap. The openings leading from the external ear appeared as distinct as in those of the other head. The skin surrounding the injured eye, which was on the same side with the mutilated ear, was in a slight degree affected, and the external canthus much contracted, but the eye itself was perfect.

The eye-lids of the superior head were never completely shut,

shut, remaining a little open, even when the child was asleep, and the eye-balls moved at random. When the child was roused, the eyes of both heads moved at the same time; but those of the superior head did not appear to be directed to the same object, but wandered in different directions. The tears flowed from the eyes of the superior head almost constantly, but never from the eyes of the other, except when crying.

The termination of the upper neck was very irregular, a good deal resembling the cicatrix of an old sore.

The superior head seemed to sympathize with the child in its natural actions. When the child cried, the features of this head were affected in a similar manner, and the tears flowed plentifully. When it sucked the mother, satisfaction was expressed by the mouth of the superior head, and the saliva flowed more copiously than at any other time; for it always flowed a little from it. When the child smiled, the features of the superior head sympathized in that action. When the skin of the superior head was pinched, the child seemed to feel little or no pain, at least not in the same proportion as was felt from a similar violence being committed on its own head or body.

The head, having been preserved after the child's death, was sent to England by Mr. Dent, Agent of the East India Company.

Mr. Home remarks that the two skulls which compose this monstrous head appear to be nearly of the same size, and equally complete in their ossification, except a small space at the upper edge of the ossa frontis of the superior skull, similar to a fontanelle. The mode, he tells us, in which the two were united is curious, as no portion of bone is either added or diminished for that purpose; but the frontal and parietal bones of each skull, instead of being bent inwards, so as to form the top of the head, are continued on; and, from the oblique position of the two heads,

the bones of the one pass a little way into the natural sutures of the other, forming a zig-zag line, or circular suture, uniting them together.

The two skulls are said to be almost equally perfect at their union; but the superior skull, as it recedes from the other, is described as becoming more imperfect and deficient in many of its parts. Mr. Home observes, for instance, that the meatus auditorius in the temporal bone is altogether wanting; and that the basis of the skull is imperfect in several respects, particularly in such parts as are to connect the skull with a body, the foramen magnum occipitale being only a small irregular hole, very insufficient to give passage to a medulla spinalis, and there being no condyles with articulating surfaces round its margin, as there were no vertebræ of the neck to be attached to it. He farther remarks, that the foramen lacerum in the basis of the cranium is only to be seen on one side, and even there is too small for the jugular vein to have passed through; that the ossa palati are deficient at their posterior part; that the lower jaw is too small for the upper; and that the condyle and coronoid process of one side are wholly wanting.

In most other respects, the two skulls, we are told, are alike; the number of teeth in both being the same, viz. sixteen.

From an examination of the internal structure of the double skull, the two brains, our author observes, have certainly been enclosed in one bony case, there being no septum of bone between them. How far they were entirely distinct, and surrounded by their proper membranes, could not then be ascertained; but from the sympathies which were taken notice of by Mr. Stark, between the two heads, more particularly those of the superior with the lower, or more perfect, Mr. Home felt inclined to believe that there was a more intimate connexion between them than simply
by

by means of nerves, and therefore that the substance of the brains was continued into one another.

Had the child, he remarks, lived to a more advanced age, and given men of observation opportunities of attending to the effects of this double brain, its influence upon the intellectual principle must have afforded a curious and useful source of inquiry; but unfortunately, he adds, the child only lived long enough to complete the ossification of the skull so as to retain its shape, by which means he has been enabled to ascertain and register the fact, without having enjoyed the satisfaction that would have resulted from an examination of the brain itself, and a more mature investigation of the effects it would have produced.

Mr. Dent, having some time ago returned to England, Mr. H. informs us, has exhibited “two portraits of the double head, taken by Mr. Devis, an artist of considerable merit, who was upon a visit at Mr. Dent’s house in Bengal when the child was brought there alive, to be shewn as a curiosity. These drawings give a more faithful representation of the appearance of the double head than the engravings annexed to the former paper, and at the same time exhibit a striking likeness of the child’s features.” A copy of these drawings is contained in the present volume of *Philosophical Transactions*, with some additional remarks by Mr. Dent, as a supplement to the former paper on this *Lusus Naturæ*. The following is a transcript of these observations :

“The child was a male. Its father was a farmer at Mundul Gaut, in the province of Bardwan, who told Mr. Dent that it was more than four years old at the time of its death*.

“The mother, who was thirty years of age, had three children, all naturally formed, and her fourth child was

* “In the former account, the child is said to have been about two years old at that time.”

the subject of the present paper. Mr. Dent endeavoured to discover whether any imaginary cause had been assigned by the parents for the unnatural formation of the child; but the mother declared, that no circumstance whatever, of an uncommon nature, had occurred: she had no fright, met with no accident, and went through the period of her pregnancy exactly in the same way as she had done with her other children.

“ The body of the child was uncommonly thin, appearing emaciated from want of due nourishment.

“ The neck of the superior head was about four inches long, and the upper part of it terminated in a hard, round, gristly tumour, nearly four inches in diameter.

“ The front teeth had cut the gums in the upper and under jaws of both heads.

“ When the child cried, the features of the superior head were not always affected; and when it smiled, the features of the superior head did not sympathize in that action.

“ In preparing the skull, which unpleasant operation Mr. Dent was obliged, from the prejudices of his servants, to superintend, he found that the dura mater belonging to each brain was continued across, at that part where the two skulls joined, so that each brain was invested in the usual way by its own proper coverings; but the dura mater which covered the cerebrum of the upper brain, adhered firmly to the dura mater of the lower brain; the two brains were therefore separate and distinct, having a complete partition between them formed by an union of the duræ matres.

“ When the contents of the double skull were taken out, and the union of the duræ matres more particularly examined, a number of large arteries and veins were seen passing through it, making a free communication between the blood-vessels of the two brains. This is a fact of considerable

siderable importance, as it explains the mode in which the upper brain received its nourishment.

“ Before these observations were communicated by Mr. Dent, it was natural to suppose that the two brains had been united into one mass, as it was difficult to imagine in what way the upper brain could be supplied with blood.”

V. *Observations on the Manners, Habits, and Natural History of the Elephant.* By JOHN CORSE, Esq.

This narrative communicates several interesting particulars concerning the natural history of elephants, which have never before been published, and are not generally known. As it would be inconsistent with our plan to give a full detail of these facts, we must refer the curious reader to the original paper. The only particulars we think it necessary to mention, are, that the procreation of TAME elephants has been demonstrated by repeated experiments; that the *coitus* is performed *more brutorum*, and not after the manner described by Aristotle; that females shew evident signs of impregnation about three months after coition; that the common period of gestation is nearly twenty-one months; that the stature of this animal at its birth rarely exceeds thirty-four inches; that elephants generally grow till about their twentieth or twenty-fourth year; that their full height is from seven feet to ten feet six inches, very seldom more; and that the penis of the male, *vigente venere*, is from two feet four to two feet six inches in length, and from fourteen to sixteen inches in circumference.

The dimensions of the largest elephant the author ever heard of, on good authority, (and he had seen a list of one hundred and fifty,) was as follows:

	ft.	in.
From foot to foot, over the shoulder	22	10½
From the top of the shoulder, perpendicular height	10	6
From the top of the head, when set up, as he ought		
to march in state	12	2
From the front of the face to the insertion of the tail	15	11

VI. *On the Decomposition of the Acid of Borax or Sedative Salt.* By LAWRENCE DE CRELL, M.D. F.R.S. Lond. & Edinb. and M.R.I.A. Translated from the German.

“The acid above-mentioned has hitherto been discovered only by HÖFER, in the Lagone of Castelnovo; by MARTINOVICH, in the Petroleum of Gallicia, mixed with alkaline earth; and by Mr. WESTRUMB, near Luneburg.” This acid has been supposed not to be a simple substance, and some chemical experimenters have declared that they have succeeded occasionally in forming the acid of borax by a particular composition; but Dr. de Crell remarks, that no person had ever examined the sedative salt by way of analysis; which indeed can hardly be wondered at, as it may be kept fluid, in the hottest fire, for many hours together, till it becomes a vitrified substance, and when afterwards dissolved in water, the solution will shoot into crystals as before.

Dr. de Crell having previously considered in what manner the decomposition of this substance might probably be effected, made his experiments with the oxygenated muriatic acid, prepared with manganese. He applied this menstruum by means of a gentle, long-continued, digestive heat, which is found in difficult analyses to be more effectual than a violent heat. Sixty-six very curious experiments are then recited, sufficiently tending to prove the decomposition of sedative salt, and to shew that “one of its component parts is inflammable matter, which may be converted into coal. I obtained,” says the ingenious author, “of true coal, mixed with some earth, (Exp. xxii. and liv.) according to the above-described experiments, (Exp. xxii. xxvi.—xxx.) thirty grains and three quarters in the whole; and by other experiments, often repeated, in general, one grain and a half, more or less. Every other substance liable to be changed into coal (as gum, tartar, sugar, &c.) suffers this change by a gentle heat, and de-
flagrates

flagrates with nitre, in the degree of heat necessary to melt the former. But sedative salt can bear a red heat for many hours, without shewing any signs of becoming coal, of burning, or of deflagration. Astonishing phenomenon! What menstruum preserves it so securely against the assault of force, in a dissolved state, and yet suffers itself to be separated from it by more gentle means? What power exists here to protect the inflammable particles (which afterwards turn to coal) so effectually against a degree of heat, which nothing else can resist? Of what nature is the salt obtained in conjunction with the coal? These are all questions which excite great interest, but which are not easily answered. How far I have been successful in resolving them, some subsequent essays will shew; which I shall have the honour of laying before the Royal Society, as soon as I shall have sufficiently repeated the experiments I have already made."

This interesting paper occupies seventeen quarto pages; but we can only allow room for the above statement of the general result of Dr. de Crell's analysis. Y.

ART. IV. *Von den Blattern und deren Aurotung, &c. i. e. On the Small-pox and their Extinction.* By Dr. ELIAS HENSCHEL, Physician in Breslaw. Octavo. pp. 253. 1796.

THE author of this tract exhibits throughout the work a cool and deliberate judgment, much moderation in discussion, and benevolent views towards his fellow-creatures. The facts which relate to the cow-pox not being known at the period when he wrote, and every other method which has yet been proposed for the eradicating, or rather preventing, variolous contagion, having been found inefficacious, it is not wonderful that he should conclude that the disease is not capable of being extinguished. Of this, however, we

shall speak again, when we come to that part of his work which treats particularly of this subject; for there are various other points which engage his attention beside this.

The following is a list of them:—Are the seeds of the disease born with us?—The history of the small-pox.—Inquiry into the properties of variolous matter, and its mode of infection.—Of the remedies which prepare the system for the disease.—Is a total extinction of the small-pox possible?—Of the principal advantages of inoculation.—Can we reduce the mortality of small-pox by any other more judicious method?

Such are the principal contents of this essay, all of which are treated in a clear and concise manner, but do not offer any thing new to the well-informed physician. We shall select, however, some of the facts, opinions, and passages, which have most engaged our attention. Before the sixth month of infancy, the author observes, (p. 59,) few are affected with this disorder. This is an observation which certainly is founded on fact; but we do not think the real cause of this fact has been ascertained. It may be owing to the little communication which infants before that period have with other children: or, it may arise from a want of disposition in their frame to take on a disease of this nature.

Dr. H. informs us, that the small-pox are almost always of a bad kind in the neighbourhood of that part of Breslaw where the river Ohlau flows slowly and is full of mud and corruptible matters. Indeed, he says that all contagious fevers put on their worst appearance in the vicinity of that place.

When the eruption is attended with considerable fever and uneasiness, the author strongly recommends blisters and the warm bath, as remedies which afford the speediest and best relief. Dimsdale's powder he also praises as a remedy which facilitates the eruption.

The attempt to confine the small-pox to a few individuals,

duals, and ultimately to extinguish the disease by following a similar mode of prevention as has been employed in the plague, he thinks injudicious and inefficacious. The plague spreads itself quickly among all ranks of people, and among people of all ages its mortality is dreadful and its strides are rapid; nor does the once having had that disease ensure a person from a relapse or renewal of its attack. Therefore every precaution, however severe it may be in regard of individuals, is justified by state policy; but as the mortality of the small-pox is comparatively very trifling, as adults do not easily receive the infection in the natural way, and as a person who has once had the disease is not subject to a return of it, severe methods of prevention cannot be tolerated. The small-pox, the author justly observes, are not now foreign foes who invade our land; they are naturalized in our country, and indeed have so subjugated it as to be considered as endemical. Let the city of Chester in England, says Dr. Henschel, stand as an example of the fallibility of all mild attempts to eradicate this disease.

It must be evident, that although it be admitted that civil institutions do not prevent the small-pox from visiting us every year, and communicating itself from one neighbourhood to another; yet, the attempt which is now making to destroy the disposition to this disease in the rising generation, by the introduction and effects of a new animal poison, may perhaps ultimately eradicate the small-pox from Great Britain. We therefore cannot allow the conclusion of Dr. H. to be decisive; although we think his book is well written, and deserving of attention.

It appears from Dr. PEARSON'S recent communication to us on the vaccine disease, (*Lond. Med. Rev. for August,*) that this important subject is beginning to excite considerable attention in Germany; and there can be little room to doubt that great benefit will finally result from the investigation.

M.

ART.

ART. V. DR. BEDDOES on Pulmonary Consumption.

(Concluded from page 13.)

THE occasional Connexion between Catarrh and Consumption—the Connexion between the scrophulous Temperament and Consumption—and the Formation of Tubercles. On this head the author makes the following observations :

“ From the altered balance between the two sets of vessels, together with the altered quantity and quality of the matters exhaled and inhaled, let us try if we cannot form an idea of the scrophulous enlargement of the glands, of the formation of tubercles, and of the effect of colds, both when they go off without injury, and when they are followed by consumption.

“ Lest I should scandalize the anatomist, who knows that no glands have been found in the cellular substance of the lungs, I think it proper to declare, that it is not my intention to represent the scrophulous enlargement of glands, and the formation of tubercles, as identical, but merely as analogous processes.

“ In scrophulous swellings of the glands, the absorbents act more feebly than the arteries. More is conveyed than is carried away. Hence there is probably a more than natural deposition of moisture in the cells, and certainly an increase of substance. By this very accumulation, the action of the arteries seems considerably altered, and the gland commonly becomes full of a matter of soft consistence, like curd mixed with cream. A mixture of the same kind often fills pimples that rise on the face and other parts. They are filled exactly in the same way, by the preponderance of the power of the arteries, and by their altered action. A substance is thrown out, which the absorbents do not remove at all, or not so fast as it is accumulated.

“ Those substances, which on account of their hardness are called stones, are formed by an operation precisely similar.

“ Should

“ Should any cause so alter the action of the arteries, that a hard particle is thrown out into the loose cellular substance of the lungs, and should the absorbents be unable to remove it, the foundation of a tubercle will be laid. Accretion may take place, not only from the continued action of the original cause, but it appears that the nucleus itself may act so as to make the arteries throw out more of this substance. An experiment, tried, I believe by Dr. Haigh-ton, upon an animal particularly exempt from consumption, seems strongly to confirm this very simple reasoning. Two drams of quicksilver were thrown into one of the veins of a dog. In less than two days a degree of feverishness followed, as appeared from the hardness and quickness of the pulse. Difficulty of breathing, and cough, quickly succeeded. These symptoms increased till the death of the animal. On dissection, tubercles were found in the lungs. Many of these tubercles were full of purulent matter; and, on cutting open those which were still firm, a globule of quicksilver was discovered in the centre of each, ‘forming a kind of nucleus to the circumscribed inflammation or tubercle.’ (*Saunders on the Liver*, p. 236.)—Here it is evident that the quicksilver, having been delivered by the veins to the heart, and by the heart to the arteries, was by them thrown into the cellular substance of the lungs, and probably into that of the whole body. The absorbents not being able to remove it from the lungs, the arteries were stimulated to secrete the matter of which the tubercles consisted.”

The remainder of this section contains a few observations to establish a resemblance between tubercles and diseased mesenteric glands,—the relation which pulmonary consumption bears to a certain age,—and remarks on the manners, customs, &c. of the present and former times.

OF THE PHYSICAL EXTERIOR. An enumeration of the indications of a scrophulous habit.

BLEEDING

BLEEDING AT THE NOSE. Frequent bleedings at the nose without any external violence, the author is of opinion, may be properly reckoned among the earlier marks of a consumptive tendency. The cause appears, he observes, to depend upon a want of equality in the powers of the arteries and veins, precisely similar to that disturbance of the balance between the arteries and absorbents, which has been already described.

THE BLOOD-WARM BATH. "Experience," says Dr. Beddoes, "in places where the warm bath is employed with almost incredible perseverance, is decidedly in favour of its strengthening power. At Pfeffers, in Switzerland (which is esteemed one of the purest of all waters from impregnation,) from seven to twelve hours are daily spent in the bath, and this upon the average is continued for a couple of months. Dr. Tissot says he has been credibly informed, that at a bathing-place in the Valais, patients pass the greater part of the time of their residence in the water. Dr. Marcard attests, that at Baden, in Argow, he has himself seen invalids sit four or five hours in the bath."

The author then proceeds to lay before the reader "some precise information concerning the effect of the tepid bath on the organs that keep the blood in circulation. This is of the greater importance to the present inquiry, because, in the phthisically disposed, the pulse is usually over-quick, especially when they begin to fall off from their ordinary health. For the facts, I shall be indebted to Dr. Marcard. But it may perhaps add to the authority of his report if I mention, that before his interesting work fell into my hands, I had made observations of the same kind.

"1. Dr. Marcard's first experiment was upon a young man, in a complaint attended with emaciation, whose pulse was usually somewhat feverish. After sitting perfectly still in his apartment, where the temperature was scarce 58°, the pulse was 98 in a minute. The bath was heated pre-
ciously

cisely to 96°. After being in it eight minutes, the pulse was 92; in thirty minutes it was 88; and he remarked that he felt very comfortably. By evening the pulse regained its former quickness.

“ 2. A girl of twelve had a pulse of 96, in a room at 74°. After being in the bath half an hour, her pulse was lowered to 80.

“ 3. A lady of thirty-six, of a vivacity unusual in a northern climate, had a pulse of 84, which was its usual standard. She had never bathed; the idea, therefore, excited a degree of terror, on account of which, and of a degree of nausea, she took a glass of wine beforehand. Nevertheless, in half an hour, her pulse, in a bath at 94°, fell to 72. The heat of the room was 69°.

“ 4. Dr. Marcard himself, with a pulse of 70, went into a bath at 93°, the room being at 70°. Having been accustomed to cold water, the bath felt too warm, and produced a sense of anxiety and spasm (about the chest, I presume.) He had the bath, therefore, lowered one degree, and in half an hour the pulse beat only 60 strokes in the minute.

“ 5. A lady of thirty-eight, in a room at 74°, had a pulse of 78 before bathing. After half an hour's continuance in water at 92° (which to her was an agreeable temperature,) her pulse was brought down to 70.

“ 6. A man of fifty, in a room at 78°, had a pulse of 73. After continuing half an hour in a bath at 92°, which he felt rather too warm, his pulse was but one stroke slower.

“ 7. An hypochondriac of sixty, in a room at 76°, and under some oppression, had a pulse of 96. After three quarters of an hour's continuance in a bath at 90°, his pulse was but 68.

“ 8. Two days afterwards, the same person, in a room at 72°, had a pulse of 80. His bath was 89°, and at last but 88°. He continued in it for an hour; and getting
out

out had a cold shivering. Nevertheless, when this had gone off in bed, I found his pulse only 60.

“ 9. A lady of twenty-seven, exceedingly nervous, and much troubled with spasmodic seizures, had a pulse of 96, in a room at 73°. After being twenty-five minutes in a bath at 90°, her pulse was still 96. In thirty-five minutes it was 94. She had a great dread of the bath.

“ 10. In three quarters of an hour, the same person's pulse rose from 80 to 92, in a bath of 90°. But she had spasms. This is the only time, except once, that the author observed the pulse to rise in a bath of this temperature; but he observes, that a person may be taken ill when bathing. Perhaps the too low temperature occasioned the indisposition in this instance.

“ 11. The same lady bathed again two days afterwards; the water was at 91°, the pulse 98. In three quarters of an hour it fell to 80. The author adds, that this debilitated, morbidly sensible, or nervous female, who had been long ill, and had tried various remedies to no purpose, recovered after a course of bathing of a month's continuance.

“ 12. Dr. Marcard went into a bath at 89°, his chamber being 72°, and his pulse 63. In an hour and half he counted only 54 pulsations; his feelings being highly pleasant at the time, which in his then state of health was uncommon.

“ 13. An excessively nervous young Russian took the bath one day, when he was irritated by the warmth of the weather, and by his spasms. His pulse was 104, the room at 77°, the water at 90°. In twenty minutes his pulse was only 64.

“ 14. A very sickly child had a pulse of 144, in a room at 60°. His bath was at 88°, and in twenty minutes his pulse was only 116.

“ 15. A very striking diminution of the pulse was observed in a child of seven years and a quarter, who lay in a
hopeless

hopeless state of stupor and convulsion, and actually died in sixteen hours after. The pulse could not be accurately counted without the greatest difficulty. In every five seconds there were more than 16 pulsations; in a minute, therefore, about 200. The child was put into a bath at 93°, because the thermometer, under his armpit, rose no higher, and the temperature seemed perfectly agreeable to his feelings, as he was perfectly quiet in the bath. In half an hour the pulse was sensibly slower, and more distinct; and in an hour, the author could count 140 strokes in a minute. It had, therefore, in this time, fallen 60 strokes in the minute.

“ 16. A lady, whom her physicians had declared to be hectic, because her pulse was quick, and her flesh wasted, consulted the author. Her pulse, he says, was always 100—106, and occasionally rose to 120, and above, at which time she felt extremely ill. The slightest movement produced this quickness of the pulse, without the feelings of extreme illness.

“ Before the first immersion the pulse was 120. The water was heated to 94°, and in half an hour the pulse had not lowered above one or two strokes. That evening, and the next morning, it was 96: Dr. Marcard had never found it so low before.

“ ‘ Before the second bathing the pulse was 120, and in
‘ the bath 122. At first I imputed something to dread of
‘ the bath; but the effect continued, though I reduced the
‘ bath to 90°. The pulse was almost always quicker the day
‘ of bathing. On the whole it was slower, but always quicker
‘ in the bath. After the twelfth bathing, it was constantly
‘ at 94 out of the bath; but the thirteenth time of bath-
‘ ing it beat 106 times. The health of this patient was
‘ soon fully restored. She became perfectly regular, after
‘ having for a year ceased to be so. Her pulse, however,
‘ continued preternaturally quick, never falling below 94,
‘ and sometimes rising to 116. After a lapse of some
‘ months,

‘ months, I, for the first time, found the pulse perfectly
‘ natural, though still disposed to rise from slight causes.’

“ 17. The following equally striking, and ultimately successful experiment, affords a convincing proof, that the reduction of the pulse in the last case but one was not the effect of some unobserved cause, but depended on the warm bathing: ‘ A child, three years old,’ says the author, ‘ had
‘ a violent seizure, attended with vomiting. The usual
‘ means were employed, and the feet frequently bathed.
‘ The fever continually increased, though even in the open
‘ air. In 36 hours, the pulse had increased to 156; and
‘ in 48 hours, it could no longer be exactly counted. I
‘ could only number it for five seconds together, in which
‘ there were always 15 or 16 strokes, that is, between 180
‘ and 192 in the minute—a formidable degree of fever, announcing a highly dangerous illness. The child was at
‘ the same time excessively ill and restless. According to
‘ my ideas of practice, I could oppose nothing to these
‘ threatening symptoms but the warm bath; and I began
‘ to reproach myself for not having had recourse to it
‘ sooner.—I therefore had a bath prepared in the middle of
‘ the night. I was doubtful what temperature to employ,
‘ as the child was preternaturally heated.—A very accurate
‘ thermometer, made by Ramsden, placed in the child’s
‘ hand, which I then grasped with my own, rose to 100°:
‘ hence, I fixed upon 94° for the bath. The moment the
‘ child was put in some eructations were observed, and it
‘ seemed much quieter. In a quarter of an hour I counted
‘ 148 pulsations in the minute. In half an hour they were
‘ 136 only. In three quarters of an hour the same. The
‘ bath was now cooled one degree. In 50 minutes the
‘ child manifested a vehement desire to be put into bed, and
‘ so it was taken out of the water. It was wonderfully
‘ quieted by the immersion. For twenty-four hours it had
‘ done nothing but moan, cry, and fret, contrary to its
‘ usual

usual mood. On being placed in bed, it was all at once tranquil, seemed to have no unpleasant sensation, and good-humouredly wishing every body good night, fell asleep, as if in sound health; had an almost natural respiration, and did not stir. The pulse did not return to its former quickness. Six hours after it was at 148. The small-pox now appeared, and was very severe. Whether the disorder would have been fatal, if the fever had continued to rage with equal force from twelve till ten o'clock next morning, which was the hour of the eruption, and whether earlier and more frequent bathings would have lessened the disorder, I cannot decide, though I think it probable.

The author relates, moreover, nine experiments with baths of a temperature between 82° and 60°; and one experiment at 98° and 100°: in which last the pulse was increased from 12 to 14 strokes in the minute.

He draws the following general inferences:—1. Every bath below 96° diminishes the quickness of the pulse, when no particular circumstance occurs to prevent this effect. 2. The greater the frequency of the pulse beyond its natural rate, the more it is diminished by the bath. It must, however, be observed, that in several of the preceding cases, the entire diminution cannot, by any means, be referred to the bathing. The pulse had sometimes been raised by motion, fear, or spasms, and would of itself, after some time, have subsided. The temperature which seems to have the greatest power of reducing the pulse, is that between 96° and 85° of Fahrenheit's thermometer. This the author terms *warm*, or *tepid*—(*warm oder lauwarm*). And he uses the term *seems*, because he has few accurate observations on cool and cold baths. He never continued the cool so long as the tepid bath, and therefore cannot say what they would have done in the space of an hour.

On the change produced upon the respiration by bath-

ing, this diligent observer makes several pertinent remarks. The effect is more difficult to be determined than in the case of the pulse. In general, he says, *after some time*, the breath grows slower. But in unaccustomed, and nervous people, it is long before the quickness, immediately subsequent to immersion, and occasioned by the pressure of the water, is over. And even when the breath is very slow, a somewhat greater effort may be observed during the *inspiration*, and a sudden impulse at the end of the *expiration*. ‘I have (he concludes) too often noticed the slowness of respiration in the tepid bath, to entertain the slightest doubt of the fact, though I have not ascertained the degree by a stop-watch.—When a general calm is produced, it is natural that the function of respiration should participate in it; besides, the breath *must* be slower, because the pulse is retarded. That, in persons who go with dread into the bath, the breath will be quickened, as long as this state of mind continues, it is easy to foresee’.”

Several other parts of Dr. Marcard's work are quoted. Dr. Beddoes then observes—“My experience of the blood-warm bath extends to a considerable number of cases, particularly of persons, who, from the loss of relations by consumption, with obscure but alarming feelings of indisposition, or with some of the more evident symptoms, dreaded an attack of the disease. Sensible benefit was received by most; permanent benefit by several; injury by none. The reduction of the pulse during the time of immersion was perfectly ascertained, in a number of instances; and the strengthening effect of the bath was sometimes so apparent, that several of those whom I desired to bathe every other day, have assured me, that on the day of bathing they felt capable of greater exertion than on the following, or preceding day.

“My directions generally were, that the temperature should not exceed 96°, nor be below 90°; but between those limits

limits it should be that most agreeable to the patient's feelings. And every one who has tried knows how sensibly the difference of a single degree is felt. The time which I have generally recommended for bathing, has been between breakfast and dinner. For I have known an increase of pulse, and a degree of feverishness, produced after dinner, by water at a temperature at which it would not have had any such effect when the stomach was not full. There is another disadvantage with which late bathers are threatened, namely, night-sweats; which, when it is the object to strengthen, ought most carefully to be avoided.

“ The rule which I have commonly laid down for continuance in the bath has been, to quit it the moment any unpleasant sensation is felt: but if no such sensation takes place, by gradual prolongations of about a quarter of an hour each time, to stay in for a full hour. This is said in a supposition, that the first trial will be for twenty, or twenty-five minutes.

“ On coming out, no other precautions are necessary, than prudence at other times would dictate. As perspiration must be sedulously avoided, no load of additional clothing is admissible: and whatever clothing the season requires will be sufficient for the bather. In many scores of instances, where a person has walked abroad immediately after the blood-warm bath, just as if nothing more than ordinary had occurred to him, I have not known one in which a cold was taken. I rather think a person more secure from such an accident after bathing.

“ In advanced consumption, I consider bathing as too hazardous to be lightly tried. Two years ago I attended two young men, accustomed to communicate their complaints to one another. One was in the last stage of consumption, that is, in addition to the other usual symptoms, he had some evening swelling of the feet. The other was just upon the verge of the disorder, into which exposure

during military service afterwards precipitated him. By my advice he used the tepid bath, and seemed to himself to receive so much benefit, that he boasted of it to his acquaintance, who was induced by this information, in spite of all my remonstrances (for I was alarmed for the immediate issue of the trial,) to go into the bath also. He coughed with excessive violence, and breathed with great difficulty, while in the water; and thought himself considerably worse in both these respects for two days. His ill success in the first deterred him from a second experiment.

“I mention this instance as a caution to the consumptive not to plunge into the tepid bath in consequence of the preceding general recommendation, without being well advised. For I think, that in cases and at times when the pressure of the water is not likely to provoke coughing, it may give relief; and in one case, of a child, in whom consumption had succeeded to the measles, I found it reduce the pulse full twenty strokes in a minute, ease the difficulty of respiration, and procure a general feeling of relief for several successive days. But I went to work with every possible precaution, and was prepared to remove the patient the instant any sign of distress should appear.”

BED-WARMTH. The author here says, “should the heat of the body rise above the ninety-sixth degree, as it sometimes does considerably, the bed becomes a hot bath, with all the stimulating, and, to many constitutions, pernicious properties of the hot bath. If a person thus circumstanced continue long asleep, he either falls into perspiration, or awakes feverish and unrefreshed. If perspiration have broken out, the linen should be changed, and the person should remove to a dry part of the bed. In the case of heat of the skin, without moisture, advantage should be taken of the cooling effect of the atmosphere, either by rising, or by diminishing the bed-clothes. I know no rule of health, to which stricter attention ought to be paid, than
this :

this : *when a person of feeble habit feels heated in a morning, let him rise without a moment's delay.*"

COLD BATH. COLD AIR. "Much sickness, and many deaths, have been, and are occasioned, by immersion in water below 50° and 60°. It may be in general asserted, that no measure more certainly enfeebles the weak, and more certainly excites pulmonary consumption in the predisposed, or hurries on the disease faster when it is forming.

"Men of strong constitution, reduced by temporary causes, are liable to consumption on exposure to severe cold. For it is immaterial whether the medium in which they are immersed be water or air. And unless peculiarity of constitution, or the exertion of certain muscles, renders other parts particularly sensible to cold, the chest will generally suffer most.

"To enumerate all the ways in which cold excites pulmonary consumption in those who have the disposition, would be equally difficult and useless. It suffices to have given a distinct admonition against great and long-continued chills. It is of course that they should injure different people in different degrees.

"In scrophula, cold sea-bathing was heretofore in high repute. The opinion of its efficacy was probably founded, in part, on its supposed bracing power. It is, however, certain, that in this complaint the latest observers declare strongly against the cold, and equally in favour of the tepid bath, whether of salt or fresh water."

COOL BATH. By the cool bath is meant, water between 80 and 65 degrees of the thermometer.

"In summer, people rather weakly, who have no cough, or other complaint of the chest, may plunge for an instant into water at 75°. In the winter, exposure to the atmosphere, but in a way not to be chilled by it, will be sufficient for such constitutions."

Speaking of the utility of dipping children in cool water,

Dr. B. judiciously remarks that “the temperature of the water in which the infant is to be dipped must be regulated by his constitution. The more puny, the less cool should the bath be, especially at first. An observant parent will easily distinguish by the effects when the temperature is too low. The countenance in this case will be dull, the motions sluggish, the nose, ears, and feet cold. When there is an increase, or no immediate diminution of alacrity, it may be concluded that the bath is not too cold. And the continuance or improvement of health, in the long run, will furnish another criterion.”

APPROACH OF CONSUMPTION. The object of this section is, “only to endeavour to make it understood, when it is time to apply for advice, and how the *serious evil of useless medication* may be avoided.”

“REFLECTIONS *on the removal of the indisposition immediately preceding pulmonary ulceration, and on the prospect of a cure for confirmed consumption* *.”

After mentioning the hitherto ineffectual measures which have been adopted for the cure of a disease, that, from year to year, has extinguished “the life of near an hundred thousand human beings,” our ingenious author alludes to the system of medicine which has suggested the treatment lately introduced for the *diabetes* and *lues venerea*. He supposes that the period is not very remote, when multitudes will engage in this fertile system; and the signs of this productive labour commencing, says he, “will be these: the public will be too intelligent to be duped by those artifices which have so often given medical men vogue in the great world; and fashionable physicians will either become scientific, or scientific physicians will become fashionable,

* Since the foregoing pages were printed, we have received the *second edition of Dr. B.'s Essay* (pp. 340, price 6s.) much enlarged, and in many respects improved. The following extracts on the CURE OF CONSUMPTION, are taken entirely from this new edition, p. 278 & seq.

“ But it is not only because the present æra of medicine is distinguished from all the preceding by great practical discoveries, immediately resulting from speculation, that we are entitled to hope for a diminution of the mortality from consumption. There are more direct probabilities in favour of the event. For, to believe in the impossibility of dispersing tubercles, and by consequence of curing consumption, is to pay too great deference to the opinion of men, whom, perhaps, extraneous circumstances, such as unmerited professional success, may have rendered presumptuous; but whose denunciations of never-ceasing destruction against the consumptive, assuredly proceed not from any fulness of knowledge concerning the conditions of life.

“ Is not the power which we have acquired of dissipating so many other tumours, and healing so many other ulcers, a pledge that the dissipation of pulmonary tumours, and the cure of pulmonary ulcers, are not beyond the faculties of the animal economy? Nor is it necessary to trust this reasoning to mere analogy; the recoveries, however few, that have taken place, whether from sea voyages, or rare accidental combinations, shew that the cure of consumption is no physical impossibility. And that a remedy should not sooner have been discovered for this, than for some other disorders, is perhaps less owing to its essential nature, than to those events which brought the European world acquainted, at a certain æra, with Peruvian bark, quicksilver, and other powerful articles of the *materia medica*.

“ It now only remains for me to state with great brevity, by what means I think the dissipation of tubercles in the lungs, and the cure of ulcers, may at present be undertaken with the greatest probability of success.

“ Had the present essay been sent abroad twelve months ago, I must have concluded it with an exhortation to employ preservative means with greater diligence, as well on account of the *almost certain mortality* of the disease, as of its
M 4 painful

painful progress. For, notwithstanding some favourable reports furnished by practitioners, whose veracity there is no room to suspect, it becomes me to acknowledge, that the very imperfect trials hitherto made of gasses and vapours, are far from having established any thing like a successful mode of treating consumption. It is indeed certain that the exhalations of cow-houses (for I cannot impute any thing to the breath of the animal) have produced effects so strikingly beneficial, as to render the expedient highly worthy of more complete trial, either alone, or as auxiliary to other processes.

“ Happily, successive endeavours of English physicians promise a brilliant æra for humanity. An effectual remedy for many cases of phthisical cachexy, and not a few even of true consumption, appears to have been nearly ascertained. The use of the FOX-GLOVE, indeed, as I observed in a former publication, has been of late years almost universal; but the quantity employed was seldom such as necessity required, and prudence might allow.

“ It is probable, that certain beneficial effects of this plant having been accidentally discovered, were at first diffused by oral communication. Gerrard and Parkinson, old botanical writers, mention it as an expectorant; and Dr. Withering has printed from *Parkinson's Herbal*, the manuscript note of a country surgeon, affirming its efficacy in consumption. In the works of Salmon, it is said, upon the faith of long experience, perfectly to cure ‘ a phthisis or ulcer of the lungs, when all other medicines have failed, and the sick are esteemed past cure.’

“ Notwithstanding the temptation which such an encomium held out, the frequently severe operation of fox-glove, and, on some occasions, its fatal effects, caused it to be abandoned, at least by the regular practitioner, till, from its efficacy in stimulating the languid absorbents of the dropsical, of which tradition had probably perpetuated the

memory for centuries, Dr. Darwin inferred its possible use in pulmonary ulcers; and corroborated his inference by that medical miracle—a cure of confirmed consumption—evidently wrought by this plant. (*Medical Transactions*, 1785, iii. 276.)”

But very little use was made of the fox-glove, “till Dr. Drake, and Dr. Richard Fowler, led by an enlightened view of cause and effect, seem to have discovered what will not only relieve much suffering, but even now preserve many lives, and when properly pursued may lead to such a method of treating pulmonary consumption, as has always been the universal wish, but hardly, perhaps, the expectation of any.

“Dr. Drake proposed to himself two objects. He hoped that the fox-glove, by promoting absorption, would prevent that hurtful change in the ulcerous discharge, which he, in common with Dr. Darwin, supposes to be produced by the contact of air. At the same time, by powerfully retarding the action of the arterial system, the secretion of matter might be diminished or suspended. He doubted, indeed, whether he should be able, by the cautious and continued use of fox-glove, to render these consequences sufficiently permanent to promote a cure. He had the satisfaction, however, to find in two instances, which he has related at large, that the pulse could be lowered to forty strokes in a minute, and the depression continued till a complete and permanent cure was effected. That confidence in the medicine which his success so far had inspired, he informs me, has recently been strengthened by another equally remarkable cure. He mentions at the same time two cases in which he had not succeeded.

“Dr. Fowler’s attention was directed to the fox-glove, as a remedy likely to be useful in phthisis, by its almost uniform effect in rendering the action of the arteries more slow than natural, at the same time that it seems to excite the
absorbents.

absorbents. He reflected, that diseased parts of the body may be removed by depriving them of *all* supply of blood, and even by diminishing, to a certain degree, the arterial supply, while the absorbents are left to act in full force. He hoped that the latter purpose might be effected by the operation of fox-glove upon tubercles in the substance of the lungs : and proceeding upon this idea he affirms, that he has been successful in many cases of confirmed consumption, where the patients sometimes seemed not to have many days to live. (*West Country Contributions*, Longman.)

“ Both these physicians thought and acted independently of one another.—In a variety of cases where the existence of tubercles, ready to break out into open ulcers, was indicated by every symptom, I have fully experienced the virtue ascribed by Dr. Fowler and Dr. Drake to digitalis : and, in confirmed consumption itself, my observations induce me to presume, that it will sometimes act with as good effect as the Peruvian bark in ague. Could we obtain a single auxiliary for fox-glove, such as we have in many substances for the bark, I should expect that not two cases in five would terminate as ninety-nine in an hundred have hitherto terminated. But I believe a large proportion of the cases, not yet advanced beyond the stage of tubercles not ulcerated, or of hæmoptoe, will yield to simple fox-glove. And it is evident, that no new case need be suffered to advance beyond this stage without the application of the remedy.

“ I wish not to conceal that the fox-glove is a dangerous, which means only that it is a powerful, medicine. I therefore say nothing of the manner in which it should be administered ; because no person, unpractised in physic, should attempt to administer it.

“ Within the few months that have elapsed since the original preparation of this essay for the press, a great number

ber of invalids, from all ranks of life, and in every gradation of *phthisical cachexy*, and ulcerated phthisis, have fallen under my observation. I have therefore altered the present section so as to express, as accurately as I can in general terms, my corrected opinion of the virtues of digitalis. There has, in fact, occurred no stage of the complaint, in which the great power of the plant to remove the disease, or to mitigate its symptoms, has not been apparent in some instances. I do not absolutely except even the very close of the last stage.

“ I could undoubtedly fill many pages with instances of confirmed consumption, far advanced, or affecting subjects particularly feeble, in which the fox-glove has produced no beneficial effect; no reduction of the pulse taking place; or the reduction only happening in the recumbent posture, so that an immediate increase of thirty strokes or more in the minute was immediately observable on sitting up;—or else the reduction to the natural standard, or below (which has appeared a necessary condition both to cure and relief,) being unaccompanied by any alleviation of the symptoms.

“ In what I have judged imminent consumption, the same medicine has produced the most salutary effects, in at least as many cases as it has failed. The fatal consequences of hæmoptoe have been prevented; and either the symptoms associated with tubercles removed, or (what I am disposed to believe, but time alone can fully decide,) absorption of the tubercles themselves has taken place.”

Dr. Kinglake offers the following testimony, in confirmation of these remarks by Dr. Beddoes.

“ In reply to your question relative to the collective result of my experience of the effects of digitalis, in cases ‘*where tubercles not ulcerated have appeared to exist in the lungs*,’ I can confidently aver, that it has been in almost every instance of such a description, temporarily salutary, and often permanently curative.

“ The

“The strictly incipient form of phthisis pulmonalis is but rarely an object of medical treatment, as the inconveniences it produces are yet too slight, and too much familiarized and neglected under the usual denomination of simple *cold*, or *catarrh*, to induce early attention to it. The transition from this form to that of the tuberculous is however an easy, and often a rapid process, creating in general no other alarm than that commonly attached to the consciousness of suffering under an obstinate cold. This state, generally speaking, I conceive to merit the distinctive appellation of tuberculous consumption, in which may present every degree of diversity, from the minutest point of morbid accretion, to the most fully formed indurated tumefactions. This stage usually occurs in the course of two or three months from the first attack, and is distinguished by a hard dry cough, obstructed respiration, pain more or less transient in the chest, augmented by full inspiration, small, hard, quick pulse, variable temperature of the body, febrile chills and heats, evening exacerbation of symptoms, nocturnal sweats, loss of strength, flesh, &c. Under these circumstances, and at this period of advancement, the curative efficacy of digitalis seems to be more particularly exerted; and of this description were most of the cases which fell under my observation at the pneumatic institution, in which digitalis either relieved or cured.

“Dr. Fowler has still the same reason to be convinced of the efficacy of digitalis. Concerning his more recent practice, he says, in a letter dated September 12, 1799 :
‘Subsequent experience of the digitalis gives me no reason
‘to think less favourably of its effects on consumptive patients
‘than when I last wrote to you. I have lately cured with it
‘two as severe cases as I ever remember to have seen in an
‘early stage. The tincture has in no instance with me an-
‘swered as well as the decoction. I must not conceal, how-
‘ever, that I have seen every preparation fail of curing the
‘complaint

‘ complaint in its more advanced stages.’ He then goes on to speak of the necessity of a due preparation and administration of the medicine, adding, that his success has borne a very striking proportion to the certainty he has had of all being as it should be in these respects.

“ From the full report of Dr. Kinglake it will appear, that though the digitalis (employed in the form of tincture) has not unfrequently removed almost all the symptoms in confirmed consumption, and obtained a truce with the disease, yet the hope of recovery has been eventually frustrated. Henceforward, therefore, one great object of medical research should be, the means of adequately seconding the beneficial agency of digitalis. By a very little help it appears probable, that the cure of confirmed consumption, which digitalis sometimes begins, and leaves imperfect, would be completed, and (the first appearances, or what may be called the first rudiments of the disease, being better understood in families,) that a great number of cases might be prevented from passing into the confirmed stage.”

SUMMARY, with QUERIES and REMARKS. The author here endeavours to put families on their guard against the first approaches of this insidious and fatal disease. The following seem to be “ the only general conditions, essential to exemption from phthisis—much exercise, especially during the early part of life, in the free air—such clothing as preserves temperate warmth—nutritious diet, into which animal food largely enters. Thus may good constitutions be preserved, and constitutions moderately good prevented from alteration for the worse.

“ The puny may be rendered more robust upon the same plan. But the execution demands some management. The following rules do not make up an entire system, but if their spirit be seized, analogy will easily supply the omissions.

“ *Let the anti-phthisical regimen begin early.* Children cannot too soon after birth be removed into the country.

And

And why, indeed, should not mothers be advised at the time of parturition to fly large towns? As, from some unascertained cause, cities are more destructive as children are younger, why may not the first exercise of the new function of respiration, under such deleterious influence, be supposed particularly injurious? especially as the unfavourable impression is probably received through the medium of the lungs.

“ Children removed early into the country, and suffered to enjoy the free air, are seen not unfrequently to acquire a totally new temperament. May not the practice, so common at Paris, and in other respects so worthy of reprobation, of sending new-born infants into the distant provinces, have been beneficial in this single point of view?—Other circumstances being alike, could it, in fact, fail to be so?

“ *Animal food should form a considerable part of diet, where no positive indisposition exists.*

“ *The dress should be such as to keep up a temperate feeling of warmth.* Concerning the use of flannel next the skin, there prevails a great diversity of opinion in the medical world. It appears to me probable that the error lies in the attempt to establish a general rule where none is admissible. Labourers, exposed to cold and wet, ought, I believe, undoubtedly to be wrapped in flannel. But the same thing by no means holds with regard to the subjects of the present essay. In warm weather, flannel next the skin produces a weakening action of the cutaneous vessels; and at all times, therefore, in bed, it must be injurious: and should be worn above the shirt, if worn at all, in summer.

“ *Immersion in the atmosphere of heated rooms for many hours together during the whole winter season is particularly to be avoided.* Among our opulent class, indolence for many generations appears to have been on the increase. Hence, in the place of *active* have been substituted *passive* means of producing the state of sensation denominated *comfortable*.

Among

Among the passive means, some appear less, some more detrimental. Warm clothing and a cold atmosphere seem to predispose much less to pulmonary complaints, than cool dress and a hot atmosphere. The ingenious improvements in fire-places, by Count Rumford, are, I fear, likely to be abused in this country, and, by rendering our apartments still hotter and closer, to add to the frequency of consumption.

“ There is no one habit in which it is more incumbent upon the superintendants of young people to make a change. Nor is the undertaking difficult. In lowering the temperature of our habitations, it is only necessary to guard the extremities, and particularly the feet, against the impression of cold.

“ *The weakly should never be exposed to considerable or continued chills.* In the application of this rule the difference of age will make a great difference. Infants, on whom the impression is less dangerous, should be inured to cold by immersion in water; but, as the infant is more weakly, the water should be at higher temperature. At 65° or 70°, so dense a medium will have sufficient conducting power for some constitutions at first. A caution, perhaps, ought to be given against suffering the weakly, whether young or old, to sleep during a severe frost, in apartments without a fire.

“ *The consequences of a sedentary life are extremely to be apprehended for the puny members of phthisical families.* Education should be regulated accordingly; and the principle should be regarded, as far as possible, in the employment to which young people are destined for life. Imprisonment in grammar, and in boarding-schools, must be death to multitudes. As the public is evidently coming more towards reason on the subject of education; would not seminaries, where the barbarous monkish discipline, which our schools have retained so long after the abolition of monastic institutions,

tutions, should be relinquished, and instruction through the senses, exercise and *aeration* be the leading objects, now meet with sufficient encouragement?

“ In devoting their offspring to occupations, into which they are to be initiated by long confinement in close, and sometimes damp rooms, it is also to be wished that parents could be induced to place *health* in the balance against *wealth*.”

Dr. B. then points out some of “ the most probable marks of incipient consumption;” and concludes this instructive essay with a variety of miscellaneous observations, well deserving an attentive perusal. V. T. G. F.

ART. VI. Mr. WHITE's *Regular Gradation in Man, &c.*

(Concluded from page 37.)

PART THIRD. *On the Hair.* — The observations here delivered are of very little importance. The hair which serves for a covering to the body of animals Mr. White terms *annual*, and that which serves for ornament on the head, pubes, &c. *perennial*. The former grows faster in winter than summer; the latter grows faster and longer under the torrid zone than in a temperate climate, and much faster in summer than winter. Respecting the hair, as connected with the subject of this essay, the author observes, that “ the long ornamental hair of the head, beard, &c. in the human species, exhibits a gradation in the same line as the other marks of distinction. The European has the longest hair; next to him the Asiatic; then the American; and, lastly, the African. Even the natives of Africa manifest various degrees in this respect; nor does it appear that the shortest hairs, and the deepest coloured skins, always accompany each other. I have seen many negroes, of a jet black, whose hair might have been drawn out three or
four

four inches long, and have formed a short *queue*; and I have seen others, of a yellowish complexion, whose hair was no longer than the frize or nap upon cloth. These last, in respect to their persons and their intellects, appeared to me to be the lowest in the scale of humanity, and much to resemble the Hottentots described by Dr. Thunberg."

Mr. White then considers how far the wool of sheep, which has a near affinity to hair, is altered by climate, it having been asserted that the woolly hair of the negro was the effect of climate. Mr. White, however, is of opinion, that it is a different species of hair, and not a variety occasioned by the above circumstance, nor by the peculiar mode of living, nor on their want of civilization.

PART FOURTH. *On the Colour, or Complexion of Man.*
The great diversity of complexion amongst mankind being a circumstance so obvious and striking, has generally been considered as the principal, and most characteristic, distinction of the varieties of the human race. Naturalists have differed in their opinions respecting the primitive cause of this diversity of colour, but the most celebrated writers attribute it chiefly to climate.

"The late Mr. John Hunter," says the author, "was of opinion, that the human species were originally black; because many black animals will breed white ones accidentally, but no white ones breed black ones. He said, the original breed of turkeys from the continent of Europe, and those from the continent of America, though very different birds, were all black. Black rats and mice will, sometimes, breed white ones; so will black crows, black-birds, and sparrows. White African negroes have been born of black parents, and so have pyeballed, or blotched black and white children. Both of these have been brought to England, and shewn as curiosities. They had all the

shape and appearance of ordinary negroes, except the colour; which was more of a dead white than the European. But no black children, he said, were ever the produce of European parents."

Mr. White is of opinion, that an adequate cause for the diversity of complexion has never yet been assigned. It is universally allowed, he observes, that the proximate cause is the colour of the rete mucosum, and that the epidermis, including it, is thicker in the negro than in the European. Albinus informs us, that the rete mucosum is of a deeper colour on the under side, where it joins the true skin, than it is on the upper side, where it is joined to the scarf-skin; which is also corroborated by the observations of Mr. Cruikshank, the anatomist.

"That the upper layer of the rete mucosum is lighter than the lower, must therefore be admitted; and this circumstance may be adduced as a clear proof, that the colour is not owing to the heat of the sun; since, if that were the case, the upper layer would certainly be of a deeper colour than the lower, being more exposed to the action of the sun's rays. Great stress, however, has been laid upon the circumstance, that those parts which are most exposed to the sun are blackest, as the face; and that those which are the least exposed are the palest."

Concerning the remarks delivered by many authors, respecting the colour of the Jews and Gipsies spread over the face of the earth, Mr. White asserts, that their swarthy complexions undergo no change when exposed to the varieties of climate, unless they intermarry with those proselytes whom they gain in every part of the world.

We shall here subjoin a table of the mixtures of black and white people; shewing the different degrees of colour, which, it is said, are sufficiently recognisable, and the names that have been appropriated to each.

Offspring

Offspring of a	Is denominated	Degree of Mixture.
White and Black	A Mulatto	$\frac{1}{2}$ White and $\frac{1}{2}$ Black
White and Mulatto	A Quadroon or Quarteron	$\frac{3}{4}$ White and $\frac{1}{4}$ Black.
Black and Mulatto	A Samboe or Quarteron	$\frac{3}{4}$ Black and $\frac{1}{4}$ White.
White and Quadroon	A Mestize or Quinteron	$\frac{7}{8}$ White and $\frac{1}{8}$ Black.
Black and Samboe	A Quinteron	$\frac{7}{8}$ Black and $\frac{1}{8}$ White.
White and Mestize	A (reputed) White	$\frac{15}{16}$ White and $\frac{1}{16}$ Black.
Black and Quinteron	A (reputed) Black	$\frac{15}{16}$ Black and $\frac{1}{16}$ White.

A number of extraordinary instances of colour, as those of the *Albinos*, the pyebald, blotched, or party-coloured black and white people, &c. are next particularized.

“CONCLUSORY OBSERVATIONS. Where, for the illustration of any subject, a variety of facts are collected from every part of the globe, many of them must of course depend upon the relation of persons, whose impartiality, or whose accuracy of observation, may in some instances be questioned.—Enough, however, it is hoped, is ascertained to disprove the theories by which naturalists have attempted to account for what they denominate the *varieties* of the human species; and to establish that of a *gradation*, as well of the human race, as of the animal and vegetable kingdoms in general.

“A gradation in the human race, supposing all to have descended from one pair, could only be the temporary result of accidental causes, and would scarcely merit a minute investigation. But, as a contemplation of the facts produced leads to the conclusion that various species of men were originally created and separated, by marks sufficiently discriminative, it becomes an important object, in general physiology, to trace the lines of distinction. Previously to discussing the question of *species*, it seems necessary to consider the signification of the term as used by naturalists.

“It has been found convenient for the purposes of science, to divide the three kingdoms into *classes*, *orders*, *genera*, and *species*, each superior denomination comprehending one or more of the inferior. With respect to the three first divisions, Nature herself does not seem to define,

or even to recognise them, but leaves it for the sagacity of the naturalist to seize the leading characteristics, and to arrange her productions accordingly. Of the last, however, there must be some determinate and invariable number, otherwise the productions of Nature would be liable to change every generation; and the species of animals, vegetables, and minerals, at this day, might be expected to be very different from what they were one or two thousand years ago. We find the fact to be, that where Nature is left to herself, and not interrupted by the artifice of man, as in wild animals, all kinds maintain their respective *specific* distinctions, through a series of generations; and that anomalous productions are rarely met with. This leaves us to infer, as most naturalists have done, that species were originally so created and constituted, as to be kept apart from each other, with certain characteristic distinctions, which form a proper subject for investigation. These distinctions, notwithstanding, have not, as it should seem, been ascertained in all cases; a diversity of opinion respecting them still prevailing, as may be seen by the quotations employed in the First Part.

“ The most generally received characteristic of species is derived from generation. When animals, however unlike, can breed together, and their offspring is prolific, it has been deemed sufficient to warrant the conclusion that they are of the same species, the diversity of the parent animals being attributed to accidental circumstances. On this principle, not only the various kinds of dogs, but even foxes, wolves, and jackals, must be considered as of one species. It is allowed, however, that some animals of different species will breed together, as the horse and ass; but the circumstance of their offspring being barren effectually precludes the possibility of their being of the same species. Some proofs have indeed been adduced, and upon good authority, of mules generating, although it must be acknowledged that such instances are extremely rare.

“ This hypothetic characteristic of species, derived from
generation,

generation, will, I am afraid, not be found to agree with facts well-ascertained.—It is known to every one, notwithstanding individuals of the same species are all discriminated one from another, yet that like animals generally produce their like, within certain degrees: even when the parent animals differ much from each other, the offspring, under the influence of this law, is of an intermediate nature, partaking of the properties of both. This being admitted, it is next to impossible to conceive in what manner the species of dogs, for instance, could have branched out into that diversity of kinds above alluded to, supposing that they are descended from one pair. But, even waving the inquiry how they came to be so diversified, taking them as they really are at this moment, and allowing them a free intercourse, they ought all to be reduced in a few generations to one common mould, resulting from a mixture of all the varieties now subsisting. This certainly ought to follow, on the supposition that they are all of one species, and equally prolific.

“ It may be said, the supposition of a free intercourse is not admissible, because the varieties once subsisting are carefully preserved by attention in the breeding. This is perhaps in some degree true; but still an inquiry will be suggested, why does not Nature, though under these restrictions, occasionally produce those varieties which she is supposed to have been the author of at some former period? Why does not the greyhound occasionally produce a mastiff, the spaniel a bull-dog, and the lap-dog a wolf?—These are difficulties which the advocates for the hypothesis ought, if possible, to obviate; since, whilst they exist, they seem to render it altogether untenable.

“ I should rather suppose that the different kinds of dogs, which, from time immemorial, have preserved their distinctive qualities, are in reality separate species of animals; and that all others are only varieties, or mongrels,

produced by the intermixture of those species, and which, like the mule, in one, two, or more generations, in the mongrel line, lose their prolific quality, and consequently become extinct.—Neither the truth nor falsehood of this opinion can, I apprehend, be proved absolutely from any facts known at present; but thus much must be admitted, that the present and former states of the dog kind, are perfectly in agreement with the hypothesis just advanced. Most certainly the state of this domestic animal at present, in regard to kinds and varieties, compared with what it was at any former period, does not lead us to conclude that the varieties are upon the point of swallowing up the different kinds, which are as numerous and excellent as in any former period: yet this conclusion is always presented to us by the other theory.

“ To apply this to the human race,—Mr. Long, in his History of Jamaica, affirms that he never knew two mulattoes have any offspring; and he seems suspicious, that in the few instances where a mulatto-woman, married to a mulatto-man, may have had offspring, it is very probably derived from another quarter. I should, however, suppose, that numerous instances might be found where two mulattoes have had offspring; yet certainly the fact related by Mr. Long is sufficient to warrant the conjecture, that mulattoes, confined to themselves, are not so prolific as others. The small proportionate number of mulattoes in the West Indies, and in America, compared with what they should have been if equally prolific with other people, is a striking circumstance.

“ If this doctrine be admitted, it will be asked, how are we to distinguish species from varieties? In answer to this it may be observed, that varieties are reducible to the common stock again. Thus, amongst men, *Albinos* are varieties, which do not fail in succeeding generations to return to the common stock. In vegetables, the variegated
holly

holly for instance, will return to the common green holly, when propagated by seed, and can only be preserved as a variety by grafting.—With respect to family, provincial or national varieties of feature and complexion, it may be observed, the more confined and circumscribed the intercourse of any people may be, the more they will assume and retain a sameness of appearance; by reason that every anomaly of feature is worn out through continual intermixture with those more nearly resembling the standard. The people of every country, therefore, which has been long inhabited, and from which foreigners have been in a great measure excluded, will have the characteristics of its first settlers, who, if few in number, might entail a peculiar cast of features on their posterity. In England, where the intercourse with foreigners has been great, and consequently a great variety of features is found, we could select individuals who would entail, if circumstanced as above, the Scotch, the Irish, or other European national characteristics, on their posterity; whereas, were we to range over Europe, we should not find men likely to propagate a race of negroes, or copper-coloured Americans.

“ From the numerous facts which have been adduced it must appear evident, that various differences exist in the human race; some of which are generally known, but others, it is presumed, have never been before pointed out. In the bony system it has been shewn, that the head, the arms, and the feet, differ materially; characteristic differences have also been pointed out in the hair, the colour of the skin, the complexion, the being adapted to a particular climate, and the being subject to different diseases in the same situation.

“ There are but two ways of accounting for this great diversity in the human frame and constitution. 1. To suppose that the diversity, great as it is, might be produced from one pair, by the slow operation of natural causes.

2. Or, to suppose that different species were originally created with those distinctive marks which they still retain.

“ The advocates for the first opinion have endeavoured to account for the colour of man from the effects of the climate in which he resides. Indeed, if climate can account for any particular diversity, it must be that of colour; for it is difficult to conceive in what manner it can affect the other differences, one way or another. Some have endeavoured to maintain, that in the course of about two centuries, during which white people from Europe have resided in the torrid zone, and negroes from Africa in the temperate zone, there is a small, but visible, change in colour, the whites approaching a little towards black, and the blacks towards white; but they have by no means made out the fact in either case. Indeed, as has been already observed, the fact seems to be, that no general and permanent affection of colour is produced by climate. The temporary discolouration of the skin, called tanning, seems to have no relation to the permanent colour of the skin: it arrives at its *maximum* a very short time after it begins, and is as soon worn off again; whereas the permanent black colour (supposing, for argument sake, it could be effected in time) must require many centuries to effect it. Thus the father, it is supposed, transmits his degree of colour to the son, and the climate still keeps increasing it: and hence ultimately, from the climate alone, or at least from external circumstances, we are taught to expect the complete change from black to white, or the contrary, in the course of perhaps fifty or a hundred generations.

“ As to the opinion, that the constitution of man may be adapted to any climate by long residence, it is not only unwarranted by facts, but is in direct opposition to all analogy, drawn from the animal and vegetable kingdoms at large.

“ On the other hypothesis we can easily account for these

these and other diversities in the human race; or rather indeed the hypothesis itself presumes upon such diversities. Besides, we find that in those animals which most resemble man in their bodily conformation, there are a great number of species differing but in small degrees one from another. The same observation, indeed, may be extended to the animal kingdom in general. Why then should we seek to infringe this apparent law of nature in regard to man, unless to serve an hypothesis?

“ The opinion here maintained, so far from degrading, tends much more to dignify the human race than the opposite one. For if, according to the latter, we admit that such great varieties can be produced in the same species as we find to exist in man, it would be easy to maintain the probability, that several species of *simia* are but varieties of the species man; since they differ as little in their organization from some individuals of the species, as these do from men in general. And, if the argument be still further extended, almost all the animal kingdom might be deduced from one pair, and be considered as one family; than which a more degrading notion certainly cannot be entertained. But the opinion advanced above effectually precludes any such consequences, as it places each species upon its own proper basis, and debars them from intermixing with other species, unless nearly resembling themselves, and even that in a limited manner.

“ Different species of men being once admitted, it will become a proper object of physiological inquiry to determine their number and distinction, with the merits, excellencies, and defects of each. In pursuing this inquiry there is no doubt but gradation will afford the proper clue to direct us. What the number of species may be, is not perhaps easy to determine. The four quarters of the globe will each, probably, furnish us with at least one. In Africa, however, there seems to be more than one species: and perhaps the
lowest

lowest degree of the human race resides there. I am inclined to think that hair, rather than colour, ought to guide us in that quarter; and that it is not the blackest inhabitants, but those with extremely short hair, and a most ungracious appearance, as the Hottentots, who may be reckoned the lowest on the scale of humanity. The Negro, the American, some of the Asiatic tribes, and the European, seem evidently to be different species.

“Ascending the line of gradation, we come at last to the white European; who being most removed from the brute creation, may, on that account, be considered as the most beautiful of the human race. No one will doubt his superiority in intellectual powers; and I believe it will be found that his capacity is naturally superior also to that of every other man. Where shall we find, unless in the European, that nobly arched head, containing such a quantity of brain, and supported by a hollow conical pillar, entering its centre? Where the perpendicular face, the prominent nose, and round projecting chin? Where that variety of features, and fulness of expression; those long, flowing, graceful ringlets; that majestic beard, those rosy cheeks and coral lips? Where that erect posture of the body and noble gait? In what other quarter of the globe shall we find the blush that overspreads the soft features of the beautiful women of Europe, that emblem of modesty, of delicate feelings, and of sense? Where that nice expression of the amiable and softer passions in the countenance; and that general elegance of features and complexion? Where, except on the bosom of the European woman, two such plump and snowy white hemispheres, tipped with vermilion?”

The author seems aware that his speculations (for we can call them nothing else) upon this intricate subject, are liable to a very strong objection.

“Some may reprobate it,” he says, “under the apprehension

hension that it has a direct tendency to discredit revelation. —To these it may be observed, that revelation was given to man for a different purpose than to instruct him in philosophy and natural history. The Mosaic account of the creation is believed, by most rational Christians, to be *allegorical*. But, even if we believe the account to be literally true, another race of mankind, besides that descended from Adam, seems implied in the text: for we nowhere read of Adam and Eve having any daughters, until it is said their eldest son ‘Cain went out from the presence of the Lord, and dwelt in the land of Nod, on the east of Eden. And Cain knew his wife, and she conceived and bare Enoch.’ (Genesis, chap. iv.) Who then was Cain’s wife, and whence did she come? Indeed it is said (chap. v. ver. 4.) that ‘the days of Adam, after he had begotten Seth, were eight hundred years, and he begat sons and daughters.’ This, it should seem, took place after the birth of Seth, and consequently long after Cain had his wife; for Seth was not born till after the death of Abel. If Cain had sisters prior to that period, from amongst whom he might have taken a wife, it is a singular circumstance that Moses should not have noticed them.”

Our limits will not permit us to discuss this question at large, nor do we feel it incumbent on us to attempt a refutation of Mr. White’s opinion. But thus much we think it right to suggest; that his reply to the objection he himself has anticipated (*i. e.* of revelation being in direct opposition to him) is by no means satisfactory: for, it is certain, the subsequent inspired writers did not treat the Mosaic account of the creation as a *fable*, or allegory; and, if we believe the account to be literally true in all its leading features, the idea of “another race of mankind besides that descended from Adam” must be regarded as a mere dream, advanced to serve an hypothesis.

It was not necessary that the inspired penman should
condescend

condescend to gratify our curiosity, in a matter so totally unconnected with his main subject. But that which Moses has omitted to mention, viz. from whence Cain took his wife, is said to have been recorded by some of the earliest eastern writers ; and it is still a current tradition among the Hebrews and Arabians, that *twin sisters* were born with Cain and with Abel: nay, they even go so far as to tell us their names. However this may be, as the sacred writings were “given for a different purpose than to instruct man in philosophy and natural history,” we totally disapprove of all attempts to establish philosophical systems on such a precarious foundation.

This volume is concluded by an appendix, containing “Detached Passages, selected from Professor Sæmmering’s Essay on the comparative Anatomy of the Negro and European ;” together with a few notes by Mr. White, to illustrate the preceding parts of his work. T. C. X.

ART. VII. Dr. CRICHTON *on Mental Derangement.*

(Continued from p. 52.)

THE SECOND BOOK of the author begins by some observations on the mind in general; to attempt to define the nature of which, Dr. C. observes, “is as vain and presumptuous an undertaking as it is to try to find out, by thought alone, the nature of the Almighty, or *whether HE existed before time, or had himself a beginning.* We have no means of throwing any light on such subjects as these, inasmuch as we have neither any direct facts which explain them, nor have we even the most distant analogies to justify and direct speculation.”—In a future edition Dr. C. will probably omit the query we have marked in italics, as he will find that we certainly possess many direct and palpable facts to guide and assist our speculations on that subject, and even to bring them to a certain and demonstrative result.

The

The author has justly remarked, that “the conclusions which are drawn concerning the more hidden secrets of nature, by some great luminaries of the present age, are done with so much apparent ease and quickness, as to shew that they have not run any very great hazard from an over-exertion of thought.”—He details the opinion of Dr. Priestley concerning the identity of brain and mind in proof of this, and has fully refuted it, by arguments which have, however, been also brought by others against that celebrated champion of materialism. Dr. Crichton seems, nevertheless, to hesitate a little on the question of the *materiality*, or *immateriality*, of the human mind. But let him speak for himself.

“Although it can be proved that the phenomena of mind are quite distinct from those which seem to belong to brain and nerves, yet this by no means settles the original question concerning the materiality, or immateriality of the soul. Although essentially different from brain, it may still be matter. Those who think thus, hope to find an apology for their opinion in arguments drawn from analogy. The uniform experience of mankind, they say, teaches us that nothing can act on matter but matter.

‘Tangere enim et tangi, nisi corpus, nulla potest res.’ LUCRET.

“But as human reason is inclined by a natural condition of thought to build its opinions upon the facts which experience yields, so the notion, that the influence which acts on the brain and nerves, and produces the external phenomena of mind, must be a physical influence, forces itself involuntarily upon the conviction of many. Those who think it is not matter, do not found their opinion on argument, but belief. The evidence of our senses, the principal source of our knowledge, does not teach us any fact similar to this. *The doctrine of immateriality is therefore a subject of faith, not of reason.*

“After

“ After the physiologist has carried his inquiry as far as possible into the nature and effects of irritability, and nervous sensibility, as well as into those of the mechanical and chemical powers which operate on the human body, he still meets with many phenomena which he cannot account for by the known influence of these agents. All the impressions received on the external extremities of nerves to which we give the name of sensations, are conveyed to the head, and seem to unite there in one point. Their production in the nerves, and their transmission along them, the physiologist can tolerably well account for ; but as soon as they arrive at the place alluded to, new phenomena occur, which are totally dissimilar from any thing depending on the organization of brain, or nerve : a thought arises ! an idea is present to his mind, which makes him conscious of the existence of the external body which acted on him ! He endeavours to collect all the observations which these new phenomena yield ; and, after having done this, and having found that he cannot account for them by the knowledge he has obtained of nervous matter, he naturally refers them to an occult cause which remains to be examined. He discovers, by means of many facts, that this occult cause is acted on by external bodies, through the medium of our senses ; and on the other hand, he observes also, that it reacts on the brain, and on the corporeal part of man, inasmuch as a single thought often alters every healthy action of the body : a power, however, must reside in something ; it must have a subject. It cannot be brain ; for in no instance whatever does a body act on itself so as to alter its natural phenomena. But the mind does this in regard to the brain ; a thought alters the whole of its action : he is therefore persuaded that there is something in man distinct from brain, to which the phenomena of mind are to be ascribed. The next step is to find out its nature ; but here he sees himself surrounded by innumerable difficulties ; it may perhaps be
distinct.

distinct from brain, and yet corporeal. This supposition leads him to investigate what that is which is called *matter*, and he soon discovers, if he is not tainted with any hypothesis, that he cannot acquire a clear idea of its real nature from experience. It is not an object of sense. He is told that the occult cause is a *spirit*, or immaterial substance. Here he is totally at a loss; but when he reflects on the term, and how the notion of *spirit* should have arisen in the mind of man, he begins to doubt whether the consciousness which all men have concerning the difference that exists between the external world and their own mind, may not have first given rise to the expression. If all that is meant by the word spirit be this, that it is a *something* distinct from our body, he accedes to the accuracy of the distinction; for sound reasoning, founded on experience, has led him to the same conclusion. He grants that the mind is not an object of external sense; he grants that it does not occupy space; yet the belief of its existence is forced upon him by the consciousness of what passes within himself: he knows not what to decide, but thinks it is loss of time to dispute about words. He is convinced that the true manner of studying the human mind is by beginning with the study of the human body; and he is persuaded that whoever studies it deeply will be convinced that the mind is totally distinct from that part which is evident to the senses. In other respects it is of very little importance to him whether it be called a matter *sui generis*, or an *immaterial substance*. Neither of these terms explain any thing to him."

We do not quite approve of the expression, *the doctrine of immateriality is not a subject of reason*; for Dr. C. himself has evinced, by a very correct chain of arguments, that reason will go a great way in support of that doctrine, however insufficient it may have been to *discover* it originally.

In speaking of the faculties of the mind, Dr. C. very properly observes, that the word *faculty* ought to be ac-

curately

curately distinguished from the word *power*; the latter ought rather to be confined to the comparative strength of the same faculties in different persons, as it is more adapted to denote the degree in which the faculty can be exercised by any individuals, than to denote the faculty itself.

Consciousness and *volition* the author calls *principles* of the mind. "The difference," he observes, "between the faculties and the principles of the mind is this; the faculties modify the sensorial impressions in a great variety of ways, giving them new characters and qualities, and converting them into objects of thought and reason, just as the functions of the body change the food into a variety of new matters, which have many distinct properties from the food as it is received into the body. The principles of the mind, on the other hand, do not modify the sensorial impression, but are excited into action by them; and their action is transferred to the faculties, just as the living principles of the body (irritability and the nervous principle) do not act on the food and blood, and on external bodies, but are excited into action by them."

Having made these preliminary remarks on the mind, Dr. Crichton enters on a particular consideration of its different faculties and principles, and the diseases to which they are severally liable. But as what is said on these subjects will be better understood in a connected detail, we shall reserve it for our next number. O.

ART. VIII. *The natural History of the Tea-tree, with Observations on the medical Qualities of Tea, and on the Effects of Tea-drinking.* A new Edition. By JOHN COAKLEY LETTSOM, M. D. Quarto. pp. 102. DILLY, London. 1799. Price 10s. 6d.

"THE subject of the following essay being now in general use among the inhabitants of this kingdom, as well as in many

many other parts of Europe, and constituting a large part of our commerce, it cannot but afford pleasure to the curious to possess the history of a shrub, with the leaves of which they are so well acquainted.

“ Many treatises have been published on the uses and effects of tea; a few writers have likewise given some circumstances relative to its natural history and preparation, the indefatigable Kæmpfer particularly: but these circumstances lie so dispersed, and the accounts which have been given of the virtues and efficacy of tea are in general so contradictory, and void of true medical observation, that it still seemed no improper subject for a candid discussion. The reader may at least have the satisfaction of seeing, in a narrow compass, the principal opinions relative to this subject.

“ One might have imagined that long and general use of tea would have furnished so many indisputable proofs of its good and bad properties, that nothing could be easier than to determine these with precision; yet so difficult a thing is it to establish physical certainty in regard to the operation of food or medicines on the human body, that our knowledge in general, even with respect to this article, is very imperfect.”

This curious and elegant work is divided into two parts. The FIRST part contains eleven sections, and four coloured engravings: one of the Green tea-plant, with references from the botanical description; one of the Bohea tea-tree; one of the *Olea fragrans*, which is employed by the Asiatics in giving a flavour to tea, and whose flowers are frequently met with in tea imported from China; and one of the *Camellia sesanqua*, whose flowers are also, according to Sir George Staunton, employed in scenting tea.

SECTION I. This contains the class, order, and description of the green, or bohea tea-plant. POLYANDRIA MONOGYNIA. CALYX. A perianthium, quinquepartite,

very small, flat, the segments round, obtuse, permanent. **COROLS.** Petals six, subrotund, concave; two exterior, less, unequal; four interior, large, equal, before they fall off recurvate. **STAMENS.** *Filaments* numerous, about 200, filiform, shorter than the corolla. *Anthemas* cordate, bilocular. **PISTIL.** *Germen* three globular bodies joined. *Style* simple, at the apex trifid. After the petals and stamens are fallen off, they part from each other, spread open, increase in length, and wither on the germen. **STIGMA** simple. **PERICARP.** A *capsule* in the form of three globular bodies united, trilocular, gaping at the top in three directions. **SEEDS** single, globose, angular on the inward side. **TRUNK** ramose, ligneous, round; the branches alternate, vague or placed in no regular order, stiffish, inclining to an ash colour, towards the top reddish. **PEDUNCLES** axillary, alternate, single, curved, uniflorous, incrassate, stipulate; the stipula single, subulate, erect, alternate, elliptical, obtusely serrate, edges between the teeth recurvate. **LEAVES**, apex emarginate, at the base very entire, smooth, glossy, bullate, venose on the under side, of a firm texture, on footstalks; the footstalks very short, round, on the under side gibbous, on the upper side flattish and slightly channelled.

SECTION II. The synonyma are here enumerated.

SECTION III. Contains a list of the authors upon tea.

SECTION IV. Of the origin of tea. "As China and Japan," says the author, "are the only countries known to us, where the tea-shrub is cultivated for use, we may reasonably conclude, that it is indigenous to one of them, if not to both. What motive first led the natives to use an infusion of tea in the present manner is uncertain; but probably in order to correct the water, which is said to be brackish and ill-tasted in many parts of those countries.

"About the year 1600, Texeira, a Spaniard, saw the dried tea-leaves in Malacca, where he was informed that the Chinese prepared a drink from this vegetable; and in

1633, Olearius found this practice prevalent among the Persians, who procured the plant under the name of *Charchia* from China, by means of the Usbeck Tartars. In 1639, Starkaw, the Russian ambassador at the court of the Mogul, Chau Altyn, partook of the infusion of tea; and at his departure was offered a quantity of it as a present for the Czar Michael Romanof, which the ambassador refused, as being an article for which he had no use.

“ This article was first introduced into Europe by the Dutch East India Company, very early in the last century; and a quantity of it was brought over from Holland about the year 1666 by Lord Arlington and Lord Ossory. In consequence of this, tea soon became known amongst people of fashion, and its use, by degrees, since that period has become general.

“ It is, however, certain, that before this time, drinking tea, even in public coffee-houses, was not uncommon; for, in 1660, a duty of four pence per gallon was laid on the liquor made and sold in all coffee-houses.

“ So early as 1678, Cornelius Bontekoe, a Dutch physician, published a treatise in his own language, on tea, coffee, and chocolate. In this he shews himself a very zealous advocate for tea, and denies the possibility of its injuring the stomach, although taken to the greatest excess, as far as one or two hundred cups in a day.”

SECTION V. Soil and culture.

SECTION VI. Gathering of the leaves. The leaves are gathered from the trees, one by one, at the following periods:

“ 1. The first commences at the middle of the last moon, immediately preceding the vernal equinox, which is the first month of the Japanese year, and falls about the latter end of our February, or beginning of March. The leaves collected at this time are called *Ficki Tsjaa*, or powdered tea, because they are pulverised, and sipped in hot water. These tender young leaves are but a few days old when they

are plucked; and, because of their scarcity and price, are disposed of to princes and rich people only; and hence this kind is called Imperial tea.

“ 2. The second gathering is made in the second Japanese month, about the latter end of March, or beginning of April. Some of the leaves at this period are come to perfection, others not arrived at their full growth; both, however, are promiscuously gathered, and are afterwards sorted into different classes, according to their age, size, and quality; the youngest, particularly, are carefully separated, and are often sold for the first gathering, or imperial tea. The tea collected at this time is called Tootsjaa, or Chinese tea, because it is infused, and drank after the Chinese manner. It is divided by the tea-dealers and merchants into four kinds, distinguished by as many names.

“ 3. The third, and last gathering, is made in the third Japanese month, which falls about our June, when the leaves are very plentiful and full grown. This kind of tea, called Ban Tsjaa, is the coarsest, and is chiefly drank by the lower class of people.

“ Some confine themselves to two gatherings in the year, their first and second answering the preceding second and third. Others have only one general gathering, which they make also at the same time with the preceding third, or last gathering: however, the leaves collected at each time are respectively separated into different sortments.

“ The Chinese collect the tea at certain seasons, but whether the same as in Japan, we are not so well informed; most probably, however, the tea harvest is nearly at the same periods, as the natives have frequent intercourse, and their commercial concerns with each other are very extensive.”

SECTION VII. Method of curing, or preparing tea in Japan.—“ Public buildings, or drying-houses, are erected for curing tea, and so regulated, that every person, who

either has not suitable conveniences, or wants the requisite skill, may bring his leaves at any time to be dried. These buildings contain from five to ten or twenty small furnaces, about three feet high, each having at the top a large flat iron pan, either high, square, or round, bent up a little on that side which is over the mouth of the furnace, which at once secures the operator from the heat of the furnace, and prevents the leaves from falling off.

“ There is also a long low table covered with mats, on which the leaves are laid, and rolled by workmen, who sit round it. The iron pan being heated to a certain degree by a little fire made in the furnace underneath, a few pounds of the fresh gathered leaves are put upon the pan; the fresh and juicy leaves crack when they touch the pan, and it is the business of the operator to shift them as quick as possible with his bare hands, till they grow too hot to be easily endured. At this instant he takes off the leaves, with a kind of shovel resembling a fan, and pours them on the mats to the rollers, who, taking small quantities at a time, roll them in the palms of their hands in one direction, while others are fanning them, that they may cool the more speedily, and retain their curl the longer.

“ This process is repeated two or three times, or oftener, before the tea is put in the stores, in order that all the moisture of the leaves may be thoroughly dissipated, and their curl more completely preserved. On every repetition the pan is less heated, and the operation performed more slowly and cautiously. The tea is then separated into the different kinds, and deposited in the store for domestic use, or exportation.”

From this account, and some experiments which have been made by the author, the suppositions of many, respecting green tea being dried on copper, must be quite erroneous.

SECTION VIII. Varieties of tea.—“ It has been already observed, that many different sortments of tea are made

during the times of collecting the leaves; and these are multiplied according to the goodness of their preparation, by which the varieties of tea may be considerably augmented. The distinctions with us are much more limited, being generally confined to three principal kinds of green, and five of bohea.

“ I. Those of the former are,

“ 1. Bing, imperial, or bloom tea, with a large loose leaf, of a light green colour, and faint delicate smell.

“ 2. Hy-tiann, hi-kiong, or hayssuen, known to us by the name of Hyson tea, so called after an East India merchant of that name, who first imported it into Europe. The leaves are closely curled and small, of a green colour, verging towards blue.

“ 3. Singlo, or songlo, which name it receives, like many other teas, from the place where it is cultivated.

“ II. The bohea teas.

“ 1. Soochuen, or sutchong, by the Chinese called saatyang, and sact-chaon, or su-tyann, is a superior kind of long-fou tea. It imparts a yellowish green colour, by infusion.

“ 2. Camho, or soumlo, called after the name of the place where it is gathered; a fragrant tea, with a violet smell. Its infusion is pale.

“ 3. Cong-fou, congo, or bong-fo. This has a larger leaf than the following, and the infusion is a little deeper coloured. It resembles the common bohea in the colour of the leaf.

“ 4. Pekao, pecko, or pekoe, by the Chinese called back-ho, or pack-ho. It is known by having the appearance of small white flowers intermixed with it.

“ 5. Common bohea, called moji by the Chinese, consists of leaves of one colour.

“ III. There has also been imported a sort of tea, in balls, of a different form from any of the preceding, made up

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into cakes or balls of different sizes, by the Chinese called Poncultcha.

“ 1. The largest kind of this cake tea that I have seen weighs about two ounces; the infusion and taste resemble those of good bohea tea.

“ 2. Another sort, which is a kind of green tea, is called tio tè; it is rolled up in a round shape, about the size of peas, and sometimes as large as a nutmeg.

“ 3. The smallest kind done in this form is called gunpowder tea.

“ 4. Sometimes the succulent tea leaves are twisted into cords like packthread, about an inch and a half or two inches long; and usually three of these are tied together at the ends by different coloured silk threads. These resemble little bavins, one of which might suffice for tea for one person. I have seen them both of green and bohea tea.”

The section concludes with the description of the *olea fragrans*, and *camellia sesanqua*, accompanied with neat engravings beautifully coloured.

SECTION IX. Drinking of tea.—This chiefly respects the manner of infusing tea for common use.

SECTION X. *Succcdanea*.—The leaves of several plants have been employed with this view, chiefly those of the *veronica*, sage, myrtle, betony, sloe, agrimony, wild rose, &c.

SECTION XI. Preserving seeds for vegetation.—The directions here delivered are accompanied by engravings of boxes, &c. for the plants and seeds.

PART II. THE MEDICAL HISTORY OF TEA.—This part comprehends sixteen sections. In the first are two experiments, from which we learn, that a piece of beef put into an infusion of tea did not become putrid so soon as a similar piece in water; and that an infusion of every kind of tea was turned into a deep purple colour by *sal martis*: so that tea, it is presumed, has an antiseptic and astringent power.

In the second section are also two experiments with the odorous water distilled from the most fragrant green tea. In the first, it was injected into the abdomen and cellular membrane of a frog: in twenty minutes one of the hind legs was much affected, and a general loss of motion and sensibility succeeded. An universal torpidity continued for four hours, after which, it gradually recovered. An experiment was made in the same way, with the liquor remaining after distillation, upon another frog, but no sensible effect was produced. In the second experiment the odorous water was applied to the ischiatic nerves: in half an hour the hindermost extremities became paralytic and insensible; and in about an hour afterwards it died. The liquor remaining after distillation was in like manner applied to another frog, but no such effect was produced. From these experiments it is concluded, that the sedative and relaxing effects of tea greatly depend upon an odorous fragrant principle, which abounds most in green tea.

The remaining sections contain a number of observations on the various effects of this herb on different persons, with an inquiry into its medicinal properties. The most interesting remarks are the following:

“ An eminent tea-broker, after having examined in one day upwards of one hundred chests of tea, only by smelling at them forcibly, in order to distinguish their respective qualities, was the next seized with a violent giddiness, head-ach, universal spasms, and loss of speech and memory. By proper assistance the symptoms abated, but he did not totally recover: for though his speech returned, and his memory in some degree, yet he continued, with unequal steps, gradually losing strength, till a partial paralysis ensued, then a more general one, and at length he died. Whether this was owing to the effluvia of the tea may perhaps be doubted. Future accidents may possibly confirm the suspicions to be just or otherwise.

“ An

“ An assistant to a tea-broker had frequently for some weeks complained of pain and giddiness of his head, after examining and mixing different kinds of tea : the giddiness was sometimes so considerable, as to render it necessary for a person to attend him, in order to prevent any injury he might suffer from falling, or other accident. He was bled in the arm freely, but without permanent relief ; his complaint returned as soon as he was exposed to his usual employment. At length he was advised to be electrified, and the shocks were directed to his head. The next day his pain was diminished, but the day after closed the tragical scene. I saw him a few hours before he died : he was insensible ; the use of his limbs almost lost ; and he sunk very suddenly into a fatal apoplexy. Whether the effluvia of the tea, or electricity, was the cause of this event, is doubtful. In either view the case is worthy of attention.

“ A young man, of a delicate constitution, had tried many powerful medicines in vain for a depression of spirits, which he laboured under to a degree of melancholy, which rendered his situation dangerous to himself and those about him. I found he drank tea very plentifully, and therefore requested him to substitute another kind of diet ; which he complied with, and afterwards gradually recovered his usual health. Some weeks after this, having a large present of fine green tea sent him, he drank a considerable quantity of the infusion on that and the following day. This was succeeded by his former dejection and melancholy, with loss of memory, tremblings, a proneness to great agitation from the most trifling circumstances, and a numerous train of nervous ailments. I saw him again, and he immediately attributed his complaints to the tea he had drank ; since which he has carefully denied himself the same indulgence, and now enjoys his former health.

“ I have known many other instances, where less degrees of depression, and other complaints depending upon
a re-

a relaxed irritable habit, have attended delicate people for many years; and though they have had the advice of skilful physicians, yet in vain have medicines been administered, till the patient has refrained from the infusion of this fragrant exotic.”

A variety of other interesting passages might be noticed; but as we have already extended our account of this publication, we shall conclude with the following opinion of our author:

“ There are idiosyncrases, certain particularities, which are objections to general rules. There are, for instance, men of this temperament, strong, healthy, vigorous, and with not only the appearance, but the requisites of firm health, to whom a few dishes of tea would produce the agitations familiar to an hysteric woman; but this is by no means general: in common they bear it well, it refreshes them, they endure fatigue after it as well as after the most substantial viands. Nothing refreshes them more than tea after lasting and vehement exercise. To such it is undoubtedly wholesome, and equal at least, if not preferable, to any other kind of regale now in use.

“ But, if we consider what may reasonably be supposed to happen to those who are in the opposite extreme of health and vigour, that is, the tender, delicate, enfeebled, whose solids are debilitated, their blood thin and aqueous, the appetite lost or depraved, without exercise, or exercising improperly; in short, where the disposition of the whole frame is altogether opposite to the inflammatory, the free and unrestrained use of this infusion, and such accompaniments, must unavoidably contribute to sink the remains of vital strength still lower.

“ Between these two extremes there are many gradations; and, every thing else being alike, tea will in general be found more or less beneficial, or injurious to individuals, in proportion as their constitutions approach nearer to these opposite extremes. To descend into all the particulars would require

require experience and abilities, more than I can boast. Suffice it to say, that, except as a medicine, or after great fatigue, large quantities are seldom beneficial, nor should it ever be drank very hot; and, as hath been already mentioned, the finer tea, the green especially, is more to be suspected than the common or middling kinds."

In another place he observes, "from what has been said upon this subject, it will probably be admitted, that children and very young persons in general should be deterred from the use of this infusion. It weakens their stomachs, impairs the digestive powers, and favours the generation of many diseases. We seldom perceive the rudiments of scrophulous diseases so often any where as in the weak feeble offspring of the inhabitants of towns, and whose breakfast and supper often consist of the weak runnings of ordinary tea, with its usual appurtenances. It ought by no means to be the common diet of boarding-schools; if it be allowed sometimes as a treat, the children should at the same time be informed, that the constant use of it would be injurious to their health, strength, and constitution in general."

A. E.

ART. IX. *The British Flora, or a Linnæan Arrangement of British Plants, with their generic and specific Characters, select Synonyms, English Names, Places of Growth, Duration, Times of Flowering, and References to Figures.* By JOHN HULL, M. D. Member of the Corporation of Surgeons, and of the Physical Society of London; of the Natural History Society of Edinburgh; and Secretary of the Literary and Philosophical Society of Manchester. Two Parts, Crown 8vo. pp. 450. BICKERSTAFF, London. 1799. Price 8s. 6d.

THE numerous corrections and additions which the catalogue of British plants has of late received, in consequence of the prevailing taste for botanical pursuits, having rendered

rendered the *Enchiridion Botanicum* of Broughton, and all similar publications, very insufficient for the purposes of the practical botanist, the author informs us that he was induced, in the beginning of last year, to prepare the volumes, now offered to the public, for the press.

In the catalogue here given will be found all the species contained in the third edition of Dr. Withering's very valuable work on the botany of these kingdoms, together with such additional ones as have been since discovered and ascertained. All the *varieties* are also given, except those depending merely upon size or colour.

In his arrangement, Dr. Hull has adhered strictly to the method established by the justly celebrated Linnæus, in preference to the reformed system of Professor Spunberg; although this has been adopted on the continent by Haenke in his edition of the *Genera Plantarum*, and by Willdenow in his *Floræ Berolinensis Prodrômus*; and in this kingdom by Sibthorpe, Withering, and Symons.

From the following statement of the plan of the British Flora, our readers will be enabled to form a judgment of the nature of the work, which appears to us, after having perused it with attention, likely to supersede all others as the naturalist's companion in a botanical excursion.

“ The *Genera* are numbered in the same manner as in Reichard's edition of the *Genera Plantarum*; and the fourteenth edition of the *Systema Vegetabilium*, published by Murray, at Göttingen, in 1784.

“ The *Characters* are in general translated from the works of Linnæus, and chiefly from the *Systema Vegetabilium*. Where Linnæan characters are wanting, the deficiency has been supplied from the works of Hudson, Lightfoot, Withering, Dickson, Smith, the Linnæan Transactions, &c. &c. With these are occasionally given some additional distinctive remarks, either included in a parenthesis, or subjoined as an observation.

“ To each *Species* is added,

“ 1. The

1. The *English Name*; except in the three last orders of the class Cryptogamia, where they have been almost universally omitted, because they are mere translations, and not properly established.

“ 2. The *General Habitation, or Situation*, in which it is found; and in some instances where the plant is very rare, the particular place is indicated.

“ 3. The *Duration*; which is expressed by the initials of the words Annual, Biennial, Perennial, Shrub, Tree.

“ 4. The *Season, or Months of Flowering*; the months being expressed by numbers, e. g. January by 1, February by 2, &c. &c.

“ 5. A *Reference to some Figure, or Figures*. In general, figure only is referred to, and in some instances an inferior English figure has been preferred to a superior foreign one, as being more accessible to the generality of readers. When two or more are given, the first place has not always been assigned to the best.

“ The *Synonyms* of Hudson, Lightfoot, and Withering, are also constantly added, when they differ from the Linnaean name, or from each other. And the synonyms of other authors are frequently given, especially in the class Cryptogamia.

“ To such species as are *doubtful natives*, a note of interrogation is affixed.”

We shall be happy to see “ An Introduction to the Study of Botany, and the natural Characters of the Genera of British Plants,” which Dr. Hull has announced as being in the press.

G. F.

ART. X. *De la Phthisie Pulmonaire*. Par J. B. T. BAUMES, Professeur de Médecine en l'Université de Montpellier, &c. 2 Tom. 8vo. 1795. Imported by DULAU, London.

PHTHISIS pulmonalis is, of all diseases in this climate, the greatest scourge to society; any observations, therefore, tending

tending to throw a light on its nature, or to mitigate its violence, cannot but be highly acceptable.

The reader will find many excellent practical remarks dispersed throughout these volumes; and the opinions of prior writers detailed, in such a manner as to evince the author to be a man of reading and science. We have thought it our duty to announce the work, as we do not recollect its being mentioned in any English medical publication; but its ancient date prevents us giving that analysis of its contents which it otherwise would deserve.

The present work obtained a prize of the Medical Society of Paris, A. D. 1783. B.

MEDICAL REPORTS AND CORRESPONDENCE.

Art. 1. *Cursory Remarks on Amputation, particularly of the Thigh; with an Engraving of a new Retractor and Saw.* By MR. GRIFFITH ROWLANDS, Member of the Corporation of Surgeons in London, Surgeon to the Infirmary and Lying-in Charity at Chester.

To the Society of Physicians and Surgeons.

GENTLEMEN,

SINCE the publication of Mr. Allanson's excellent treatise on Amputation, there has been throughout Europe a general emulation amongst surgeons to attain pre-eminence in forming good stumps; and the happiest consequences have resulted from their endeavours.

It is the object of every practitioner to save as much skin and muscles, as will completely cover the bone, and form a good pad; a circumstance which is easily accomplished in the arm, fore-arm, and leg, but in the thigh it frequently proves otherwise, as I have often witnessed, though under the management of the ablest surgeons. In some cases the bone protrudes through the skin, and exfoliates;

foliates; but more commonly the wound is with difficulty healed, leaving the bone barely covered, which, exciting constant irritation on the face of the stump, requires the utmost caution on the part of the patient to prevent ulceration.

The present improved method of amputating having been amply detailed by Mr. Allanson, Mr. Bell, and others, it would be foreign to my purpose to enter minutely into a description of the operation; I shall therefore confine myself to a few brief remarks, most of which are necessarily connected with the directions for using my retractor and saw.

The limb to be amputated being held nearly at a right angle with the body, the gluteus, and the other muscles and teguments on the back of the thigh, must be drawn up firmly by an assistant, *before* the tourniquet be applied, and secured in that state until the screw be tightened. The assistant must now shift his hands below the tourniquet, and, in the usual manner, grasp the limb and draw up the skin with the cellular substance as high as possible. In the next part of the operation, instead of making the incisions, as is usual, directly round the thigh, I have experienced great advantage from carrying them obliquely, as described by Mr. Gooch and Dr. Richter; leaving the skin, cellular membrane, and muscles, longer on the back than the fore part of the thigh.

After accomplishing my wishes in these respects, I had always some difficulty in getting the skin and muscles pulled sufficiently up, (for the easy application of the saw,) either with leather, or the common iron retractors, or with the fingers of assistants; but even if I had succeeded in the retraction in a line across the limb, the pressure of the teguments and muscles, in a fleshy thigh, against the flat side of the common saw, made it very troublesome to divide the bone so high in the muscles as to insure a good fleshy cushion

cushion on its end. To obviate the above-mentioned inconveniences, I procured the retractor and saw represented in the annexed plate; both of which answer my purpose most completely.

The retractor is simple in its construction, easy of application, and perfectly efficacious: the opening in the centre being so applied as to embrace the bone from below; the muscles and skin are easily drawn up to any extent that the operator can desire; the assistant holding the instrument by the handles, which being curved will secure his fingers from injury. It is sometimes necessary at this time with a scalpel to divide any little portion of muscle that may have escaped the knife; but the periosteum should never on any account be scraped away, as it does not in the least impede the saw; and if any portion of it be lost from the bone that remains, it may completely prevent the healing of the stump by the first intention.

I have already stated my reasons for objecting to the saw in common use, from the space it occupies against the face of the divided muscles; whereas the one I recommend removes every difficulty, as the narrow blade acts only along the breast of the retractor, the teguments and muscles protruding freely both above and below, without any risk of being hurt by the friction of the saw, or wounded by its teeth, from which a bar along the outer and lower edge of the retractor protects them.

The use of the retractor is confined to the thigh and arm; as it cannot be made to embrace the *two* bones in the leg or fore-arm, where, in my opinion, a piece of leather, slit half way into three strips, answers better, the middle strip being passed between the bones: but the saw proves equally advantageous in *all* amputations; and in fitting up cases of instruments, no other need be introduced, as the blade may be made sufficiently narrow to divide the bones of the foot or hand.

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When the ligatures of the arteries are made, I think it an advantage to cut *one* end pretty close to the knot; by which means less space is occupied by them between the lips of the wound *; and they should, if possible, be brought out at the most depending angle: but such as do not admit of this, should be left out at some distance from the end of the bone. I am particularly careful in placing the lips of the wound together, to join the skin very exactly; for which purpose I employ a probe, to prevent a doubling of the edges of the wound when the slips of sticking plaster are applied.

To promote the union of the wounds by the first intention, I have been in the habit of moistening the cross bands and compresses with spirit of wine, which will also be found beneficial in preserving the parts sweet and clean.

The saw and retractor are made by Mr. Savigny, King Street, Covent Garden, London; to whom I must refer those who wish to make trial of them, as mistakes frequently happen in instruments constructed from copper-plates, though accompanied with the clearest descriptions.

The necessary explanation for the instrument-maker is given on the plate; and I have only to observe, that retractors with openings of different sizes should be in readiness for bones of large or small diameter.

I have the honour to be, &c. &c.

Chester, October 13, 1799.

G. ROWLANDS.

* Though I have practised with great advantage the method of cutting one end of the ligature pretty close to the knot, I am doubtful whether it should be recommended to ALL practitioners; from a fear that, in *careless* hands, the knot might be so slackly tied, as to be forced open by the pulsation of the artery.

Art. 2. *A Case of œdematous Swelling, accompanied with Sphacelation of the Scrotum, &c. from the imprudent external Use of Arsenic, successfully treated.* By Mr. N. WASHBOURN,

198 *Mr. Washbourn's Case of sphacelated Scrotum.* [Oct.
of Marlborough, Wiltshire; Member of the Corporation
of Surgeons, London.

To the Society of Physicians and Surgeons.

GENTLEMEN,

I HAVE taken the liberty of transmitting the annexed case; should it be thought worthy a place in your valuable Magazine, you will oblige me by its insertion.

I remain, Gentlemen, with every wish for the promotion of medical and chirurgical knowledge,

Marlborough,

Very sincerely yours,

October 8, 1799.

N. WASHBOURN,

PAUL Wilshire, about fifty years of age, living in the neighbourhood of Devizes, made application to a rat-catcher for the cure of the itch, as he had it extremely bad. This man gave him a strong solution of arsenic, with strict injunctions for its use, which were complied with. In the course of a few hours he was attacked with pain, swelling, and inflammation upon the arms and thighs, accompanied with a considerable œdematous swelling of the scrotum, and severe rigors, succeeded by fever. Upon the whole, he was in a very deplorable situation; so much so, that I entertained doubts as to his recovery.

Not having been informed on my first visit that he had been using a remedy for the itch, I considered it as a case of erysipelas, and consequently he was that day treated for this disease, with diaphoretics, such as Pulv. contrayerv. comp. Antim. tartarisat. Nitrum pur. and the Aqua lithargy. acetat. comp. cum Camphorâ externally, which obviated inflammation in a slight degree. On my visiting him the next day, I found, from a more minute investigation, that he had been using a wash for the itch, which produced all the above symptoms. He complained of great heat and fever, with violent pains in his stomach and bowels, which I immediately at-
tributed

tributed to the absorption of arsenic.—The arms, thighs, and scrotum became vesicated, accompanied with a considerable degree of circumscribed inflammation, which terminated in sphacelation. This being the case, a different mode of treatment was immediately adopted; I gave him the cinchona, with opiates, every four or six hours: and my external applications were as follows:

R Opii purificati mollis ʒjss, Cerat. sperm. ceti ʒij. M. f. ceratum.

This anodyne cerate was spread upon lint, and applied to the whole of the sphacelated and inflamed parts; and over that the Cataplasma ex Aq. lithargy. acetat. comp. cum Cort. cinchonæ, which was renewed every night and morning. On my visiting him the following day, I found him much better, free from pain in the stomach and bowels, and the inflammation had very much subsided; suppuration also began to take place upon his arms and thighs. Nearly half the integuments of the scrotum sloughed away: and when the parts were completely separated, they were then dressed with the Cerat. lapid. calam. and dry lint. In the course of a short time he was perfectly recovered.

I have also found obstinate cases of carbuncle yield to this plan of treatment, when every effort of medicine, both internally and externally, had proved ineffectual.

The above cerate is certainly possessed of wonderful properties, as a powerful sedative, in counteracting inflammation.

Art. 4. *On the Use of the Leaves of the Tithy-malia, or Esula**, in the Cure of Jaundice. By Dr. KLEBE, of Kahla.

AN unmarried woman, fifty years of age, was suddenly very much frightened. In less than twenty-four hours after, she was seized with a deep jaundice, accompanied with

* The tithy-malia or esula is a species of euphoria.

a cough,

a cough, which was very troublesome. Several physicians of celebrity were consulted, and a variety of medicines were administered without success, and the patient became daily weaker. It was in this deplorable situation that she read, in a periodical publication, of a man who had been cured, by the juice of the tithy-malia, of a jaundice which was deemed incurable by the faculty. He had taken for three mornings successively a table-spoonful of the juice, which completely removed the yellowness. As this account appeared to have the character of authenticity, my patient, who was in a wretched situation, determined to give it a trial, but in smaller doses; as I had, as well as many other medical gentlemen, warned her against using so large a dose. It being in the spring of the year, the young leaves were gathered and separated from their stalks, and the fresh juice obtained. She began taking twenty-four drops every morning, gradually augmenting it until she took a coffee-spoonful. The effects were astonishing: in eight days the yellowness began to disappear; the pains in the region of the stomach and about the liver, which before were extremely violent, gradually left her, and in a few months she was completely cured of a disease which had baffled all medical skill.—The cure by this remedy is accomplished without any sensible effect, except when the dose is too great; then it produces pains in the stomach, colic, and diarrhoea. Physicians, therefore, who may be willing to give it a trial, should begin by administering it in small doses, and gradually increasing it in the manner I adopted; for although a table-spoonful has been given either through ignorance or mistake, no one would hazard a similar dose, lest vomiting, diarrhoea, or some other grievous symptom, should be induced.

THE
LONDON MEDICAL REVIEW
AND
MAGAZINE.

VOL. II. N° IX.—NOVEMBER MDCCXCIX.

ACCOUNT OF NEW PUBLICATIONS.

ART. I. *Medicina Nautica; an Essay on the Diseases of Seamen: with an Appendix, containing Communications on the new Doctrine of Contagion and Yellow Fever, by American Physicians; transmitted to the Admiralty by Sir John Temple, Bart. his Majesty's Consul-general.* Vol. II. By THOMAS TROTTER, M. D. Member of the Royal Medical Society, Honorary Member of the Royal Physical and other Literary Societies of Edinburgh, and Physician to his Majesty's Fleet. Octavo, pp. 475. 1799. LONGMAN and REES, London. Price 7s.

THIS volume begins with a general abstract of the state of health in the fleet for the years 1797 and 1798. The subject of contagion is then resumed from the first volume. The nitrous acid fumigation, as recommended by Dr. C. Smyth, here meets with a very formidable opponent; who is of opinion “that it has, and is still doing harm, notwithstanding the certificates in its favour that are daily transmitted

to the Board of Sick and Wounded." The animadversions of Dr. Trotter are undoubtedly deserving of attention; and such of our readers as are embarked in the controversy will reap some information by perusing them.

The following passage we select, as containing the author's opinion of the *modus operandi* of contagion.

"We have been called upon to give our opinion, in what manner contagion affects the human body. Is it to be considered as a stimulant, exhausting the sensorial power, and producing indirect debility? This subject has been hastily disposed of elsewhere: we have still many doubts; but our reflections are not sufficiently matured to decide. The matter of contagion, whatever it may be, it may be nitrous gas, or any other gas, certain it is, that it affects the human body by first impregnating the atmosphere. All these gases, we readily admit, may be called stimulants, if taken into the stomach, or applied to an excoriated surface; but as diffused in the medium which animals breathe, they render it less fit for respiration. The elective attraction of the lungs giving out and receiving noxious and salutary principles, by expiration and inspiration, is destroyed by the presence of the contagious miasmata; and the first symptoms of infection would appear to be the imperfect expansion of the lungs, abstraction of heat and oxygene, with a corresponding sensation throughout the whole frame. We see no reason, however, that excludes the supposition of the hurtful quality being *first* applied to the nerves spread on the delicate membranes of the bronchia, and *from them* communicated to the system. Is it inconsistent with the wise provisions of defence which Nature has given to other organs, to say, that the nerves expanded on the pulmonary vesicles are endowed with a perceptive disposition, that enables them to distinguish the hurtful qualities of the air, abstracted from all chemical combination, which respiration may effect on the vital fluid? Is it too gross to say, that they feel? that they

they possess an animal appetency for the express purpose? Their sense we know to be most exquisite, from the least irritation throwing the trachea and bronchia into convulsive action. And these nerves must be admirably suited for that intention; as the blood, warmed and stimulated by every fresh accession of oxygene, must be constantly bestowing excitement. Surely it is reasonable to admit from analogy, that the lungs, so wonderfully constructed, may distinguish a poisonous quality in the air through the medium of nerves, as well as the optic nerves should discern light. Sulphurous and nitrous gas excite coughing; an excoriated or wounded part feels an increase of pain when held in a vessel containing oxygene gas: with equal propriety, therefore, it may be said, that the pulmonary nerves become diseased by the application of contagious matter, and that the lungs in consequence cease to perform aright their chemical functions. I am led into these reflections by being persuaded that this subject has been considered too much in a chemical view; and the presence of a vital principle operating in the system, made but of secondary consequence in this sublime operation of Nature. Whether this opinion will be admitted or not, our doubts are not yet removed, that the effect of contagion is the abstraction of stimulus from the body, and the succeeding typhus a disease of direct debility.

“ We can hardly suppose that contagious matter acts as a stimulant producing indirect debility, when we see its action so manifestly assisted by predisposition, and that depending generally on a debilitated state of body. Its previous stimulant power has never been marked; and the very slow progress of the early symptoms sometimes is a strong argument against its existence. But if it induces fever, by directly affecting the organs of respiration, by deficient stimulus to *their nerves*, or by imparting *less oxygene* to the blood, the whole operation may be accounted for without admitting its stimulant power. The diseased condition of
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the stomach, we think, is always a secondary as an attendant on the febrile state : the contrary opinion arose chiefly from the notion, that the poison was received by the mouth, afterwards taken into the circulation, and there became the cause of the fever. This could never be the case in those instances, where contagion in a moment, quicker than thought, induces wild delirium, and sometimes instant death. As acting immediately on the organs of respiration, the fact is explained ; and also leaves us strongly impressed, that the nervous system is primarily affected.

“ We also consider the best prophylactics to be whatever gives a moderate degree of excitement to body and mind ; such as temperance in eating, wine, or fermented liquors in due quantities, amusements, regular hours of sleeping and waking, moderate venery, &c. If, however, we should wish to prevent typhus, when exposed to the infection, if of a stimulant nature, bleeding, purging, and low diet, would be the best security. These are the most certain preventives in warm climates, in European constitutions ; but we judge them to be rather unsafe in our latitudes, and in our low fevers.

“ The whole phenomena of fever may therefore be resolved as a series of sympathetic affections, from impressions made by a noxious power on our sensitive system : that the duration of these impressions, as overcoming the natural habits, constitutes the disease ; and the removal ; the recovery of health, with all its associated actions.”

THE YELLOW FEVER.—This section contains a letter from the late Mr. Edward Laing, surgeon of the 57th regiment, which gives a melancholy account of the fate of our countrymen under Sir Ralph Abercrombie, in Grenada, St. Lucie, and St. Domingo. Mr. Laing recommends attending more to prevention, by gradually bringing the gross European habit down to the West India standard, and in this way obviating the violent inflammatory symptoms with
which

which he apprehends this fever first attacks. Instead of strengthening the body, as is commonly done, by tonics and stimulants, to resist the disease, he recommends in such habits the pursuing of an opposite plan—to depend on evacuations and temperance. The remainder of the section is occupied by some remarks on the yellow fever by Messrs. Crawford and Downey.

As their method of treatment was attended in many cases with success, we have thought proper to extract the particulars. On the first complaint Mr. Crawford gave a weak solution of tartar emetic with ipecacuanha every ten minutes, till it procured a full and free vomiting: if it had not the effect of also opening the bowels, he threw up an injection of common, or Glauber's salts. When the operation of this was over, he had the patient's legs immersed to the knees in warm water, into which he put a quantity of vinegar; but he did this with no idea of revulsion, but because it was grateful to the patient, seldom failed of opening the skin, and bringing on a general perspiration, which relieved the head-ach, and often procured a favourable remission; during which he gave as much of the bark as the stomach would bear, in a variety of forms, suited as much as he could to the inclination of the patient: but there were many whose stomachs could not bear the bark even in the most delicate form. Irritation at the stomach was the most dangerous and perplexing symptom he had to combat; to alleviate which he had recourse to all the various remedies he had seen used, and even to those he had read of. Saline draughts in a state of effervescence he never found any way useful: the Tinct. opii answered in some cases, but was uncertain in its effects. Blisters were applied to the epigastric region, and removed when they had caused inflammation without blistering. He took them away at this time, as he found if they had not now allayed the irritation, they never did it after; and when allowed to cause blistering, they produced

produced troublesome sores, on which it was difficult to keep dressings in a restless fever patient. Æther he found of service, particularly in hiccup; but what proved more serviceable than every thing else, were draughts of cold water, which were eagerly desired by the patient, and drank with avidity; an indulgence of which he never saw attended with bad effects. Cold bathing was eminently serviceable in putting a stop to vomiting: this last, however, appeared so contradictory to the ideas of sailors, that he had much to combat from their prejudices. “Putting a man with a hot fever,” as they expressed it, “into a tub of cold water,” seemed to them an unprecedented and extraordinary thing; and it was not till they saw the good effects of it that they could be persuaded. The only drink he could procure was common water acidulated, and sweetened with sugar. Plenty of balm grew in the neighbourhood, that made also a grateful drink, of which many were remarkably fond, and indeed attributed to it their recovery. On observing the least symptom of debility, he supported them with wine, plenty of the best Madeira being then in the ship, to which, no doubt, many owed their lives.

In the beginning of the intermittents (which were of all types) he also gave an emetic, and repeated the same as he judged from symptoms. There were an accumulation and absorption of bile from the stomach, which were often particularly pointed out by the yellow appearance of the skin and eyes, that he had seen disappear in an extraordinary manner after the operation of an emetic, which convinced him that an emetic is often useful in more ways than merely evacuating the contents of the stomach, as has been contended for by some. Opium, given an hour previous to the accession of the cold paroxysm, always mitigated, but he cannot say it ever prevented or cured one case of the disease; but he never trusted to it alone, his chief dependance being on the bark.

Mr. Downey's method of cure was as follows: the

two first cases he thus treated : “ I gave one person calomel, and from another I took about sixteen ounces of blood. In the first case I did not find that relief I had been taught to expect ; the calomel neither running off by the bowels, nor affecting the salivary glands. I had not then ventured to give so large a dose as Dr. Chisholm recommends, nor to repeat it so often. But as the patient passed over three days without any very dangerous symptoms supervening, I persisted in its use till 150 grains were taken. No other effect followed than the pulse becoming more soft and slow, which before had been quick and contracted: the skin also, which previous to its use had been hot and dry, became more soft; but the patient lay in a state little better than comatose three days longer. He was removed on shore, where he recovered, a plentiful salivation taking place as the symptoms of fever declined.

“ The other patient, from whom blood was taken, soon felt an abatement of the pain in his head : and in an hour after he was bled, he took Pulv. jalap. \mathfrak{z} ij, Calomel. gr. x. M. This procured nine or ten evacuations, and the next morning he seemed free of complaint. I did not, however, so far trust to appearances as to neglect giving him purges on the two following days. The event of this case gave me great satisfaction ; and as I was yet to experience the effect of the calomel, I put every one of whom I had the entire care, under the plan of evacuation by *bleeding and purging*, till an attack of the fever compelled me to beg the same assistance at the hands of others.

“ Out of one hundred and thirty cases, which occurred previous to my illness, the termination of one only was fatal, where the treatment above-mentioned was fairly carried into execution.”

SMALL-POX. — It appears that this disease existed in several ships, and was in general of the most confluent kind. Dr. Trotter proposes that those who have not had

the disease be immediately inoculated. This section finishes with Dr. G. Pearson's corollaries on the cow-pox.

EPIDEMICAL OPHTHALMIA.—Upwards of three hundred of the crew of his Majesty's ship *Saturn* were seized with a species of ophthalmia, during her cruise off Brest in 1797. The account is communicated by Mr. Reilly, the surgeon.

“ The symptoms were, pains in one or both eyes, with dimness of sight, and an uneasy sensation, as if sand or some extraneous substance had insinuated itself between the palpebra and eye-ball, the tunica albuginea highly inflamed, and the vessels thereof very turgid. In some cases quickness of pulse and febrile symptoms accompanied; also severe head-ach.

“ In treating it at first,” says Mr. R. “ I gave cooling purges, indulged the use of the lancet, and had recourse to astringent collyria; which practice I found to succeed.

“ After these I gave calomel, to the quantity of five grains at night, and an ounce of natron vitriolatum in the morning, which in every case except four effected a cure.

“ These four patients had from the beginning of their indisposition symptoms of typhus; such as great debility, dejection of spirits, disturbed sleep, nervous complaints, and much sickness at stomach, with low pulse. Although their eyes were very much inflamed and painful, and they complained constantly that sand had got into them, I was under the necessity of varying the treatment. On the third day there appeared a great discharge of saliva, of a red colour, and seemed to come chiefly from the gums. Three of them, from a liberal use of wine and bark, with opium at bed-time to procure rest, recovered, after a long and painful confinement: the other died, with symptoms of great putrescency.

“ The cause of this general malady I believe to have been some peculiar constitution of the atmosphere. At this time also the people had been mischievous enough to heave the hanging stoves overboard; and the moisture was never sufficiently

sufficiently dried up prior to its making so rapid a progress. When the weather was damp, and the wind blew from the southward and eastward, I had more falling ill than when the wind came from a different quarter: as the wind, therefore, shifted, our sick list fluctuated accordingly."

NITROUS ACID IN SYPHILIS.—Three cases are related as having been cured by Dr. Browne, surgeon to the Royal Sovereign. It appears that mercury had been previously exhibited without success in these cases, and the symptoms did not yield until the acid was administered. Dr. Trotter informs us, that he attended last winter a poor woman in Portsmouth, labouring under the disease of four years standing, who had been infected by a worthless husband. She was much reduced and emaciated; had nodes on the tibia of both legs, and also on the metacarpal bones of both hands, attended with excruciating pain night and day. She had, previous to these symptoms, venereal eruptions, buboes, and a multitude of complaints; had frequently taken mercury to make her mouth a little sore, but was never thought cured.

He ordered her the nitrous acid diluted, in such quantity as she could bear. In a week or ten days the nodes disappeared, and also the pains. But in another week they returned rather worse than before; the pains also equally severe: the medicine disagreed with her, and he was obliged to give it up.

"Some physicians and surgeons," Dr. Trotter observes, "continue to support the character of this medicine; but for my own part, what success I have seen attend it I am apt to think was very much owing to the previous exhibition of mercury.—I do not," he remarks in another place, "find now among my medical acquaintance many who are prepossessed in favour of the nitrous acid: *what have been thought cures have generally broke out afresh*, and of necessity the old remedy was resorted to. Some of Mr.

Hammick's

Hamnick's patients, whose cases were published by Dr. Beddoes, have again suffered a return of the disease: two or three of this kind have been reported to me in the fleet, and they were such, where a fresh infection could not be suspected. They all yielded to mercury, in the usual forms of prescription." Dr. Trotter's account will probably confirm the scepticism of those gentlemen who have opposed the new method of treating syphilis, by acids, &c.

MISCELLANEOUS COMMUNICATIONS AND REMARKS.—We do not here find many observations of importance: but some useful methods of preparing bread, beer, and other articles, are detailed in the next section. D. G.

(*To be concluded in December.*)

ART. II. *Cautions to Women, respecting the State of Pregnancy; the Progress of Labour and Delivery; the Confinement of Child-bed; and some constitutional Diseases: including Directions to Midwives and Nurses. To which are added, Observations on the Mode of recovering a still-born Infant; the Management of Children in the Month; and the Diseases of early Infancy.* By S. H. JACKSON, M. D. of the Royal College of Physicians, London; Physician to the Westminster General Dispensary, and to the Infirmary of St. George, Hanover Square. 12mo. pp. 292. ROBINSONS, London. 1798. Price 4s.

IN this little volume Dr. Jackson has comprised an excellent code of directions for the domestic management of the fair sex, under the circumstances enumerated in the title. Many useful remarks are also introduced on the dietetic and prudential conduct of pregnant women, affected with consumptive, and other complaints. But the principal recommendation of the work is, that it forms a plain and judicious manual for midwives and nurses, who, for want of proper instruction in common matters on which they are frequently consulted

consulted by the lower class of people, often fall into the greatest mistakes.

The part of the work which will be found most interesting to medical men, is probably that in which the author treats on the mode of recovering a still-born child. On this subject he makes the following observations :

“ When the infant has suffered more than usual from long pressure during a laborious delivery, it may have been so debilitated, that respiration will not be excited by its natural stimulus, the atmosphere, though the pulsation in the cord denotes that the heart has not discontinued its action. In such a case, it may be adviseable to breathe now and then into the lungs, and to stimulate the mouth and throat with some pepper and brandy. I think, however, that respiration is more readily excited by only blowing on the face and chest, than by filling the lungs with air, when the infant is in that weak and languid condition.

“ The importance of perseverance in the use of these means for a considerable length of time, even though they should appear unsuccessful, is greater than is generally conceived : and I would again repeat, that the first and principal object in view is, to excite and continue the action of the heart, and the circulation. It is by this the infant has already lived and been prepared for respiration, and if this be preserved, respiration will take place naturally, and of course. The following case will shew the propriety of these observations.

“ About twenty years ago, I was sent for to a patient in Woodstock Street, who had been long ill with pectoral complaints, for which she had been for some time under the care of the very respectable physician, Dr. Savage. She had frequently been relieved by him, but her disorder was too far advanced to be removed. She expired in the act of lying down on her bed, soon after I entered her apartment, before I could have an opportunity of ascertain-

ing the state of her labour. I nevertheless thought it right, as soon as the hurry and confusion occasioned by so alarming an event would permit me, to examine whether any thing could yet be done to save the child. Finding the labour had been far enough advanced to admit of the delivery by instruments, I requested Mr. Bossey, the apothecary, who happened to be present, and who lived very near, to fetch me his *forceps*, with which I extracted the child much sooner than could have been expected. It was as white as paper, without even colour in the lips. I instantly divided the cord, without tying it, and taking the infant to the fire-side, began to apply the hot cloths, brandy, pepper, &c. On the unremitted use of these I wholly depended; frequently, however, agitating the child with my hand. In about a quarter of an hour I observed the cord to bleed. (The mother had been dead full half an hour.) I then put on the ligature. This appearance encouraged me to go on. I shortly after thought I saw the lips tremble, and they soon began to change colour. Presently it sobbed; and this was repeated several times, at small intervals. I persevered; and, at the expiration of an hour from the death of the mother, it breathed so well, though it had not yet cried, that I pronounced it restored. It nearly recovered the full natural complexion of a healthy infant in a few days, and lived six weeks, and might have been still living, if it had not been attempted to be brought up by hand.

“ This case not only convinced me of the propriety and importance of persisting in the means proper to be used on such an occasion, but it also led me to conceive what I have just asserted, that the first principle, on which the life of a still-born child is to be restored, is the revival of the circulation of the blood; for, it is to be considered, that there is a wide difference between the condition of a still-born infant, and that of a drowned, or suffocated person.

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The life of the child in the womb having hitherto existed only by the circulation, if this can be supported or restored, the atmosphere itself will excite the action of the respiratory organs in due season.

“ I believe we have hitherto allowed ourselves to be deceived when we have thought, that blowing air into the lungs was the immediate cause of infantile resuscitation, from not having laid down our rule of practice, as to the time for its proper application, with sufficient distinctness and precision. We have, therefore, in general, given it the whole credit where it has seemed to succeed, though its success has depended, either on the circulation not having totally ceased, or on our having, by the previous application of stimulants, first excited it. The lungs themselves, for the most part, though not entirely, are passive in the function of respiration, whose power of action must continue suspended until the circulation be restored. If, therefore, while the action of the heart, and the general circulation, are dormant, the lungs be filled with air, the distension of them may become an impediment to the commencement of a free passage of blood through them. We should therefore wait, until the energy of the respiratory organs is excited, by the success of our stimulants, in restoring the circulation, and in producing the free and natural determination of blood to the external surface of the body.

“ It is also worthy of remark, that if any external measures can avail to excite respiration, they must be such as stimulate the respiratory muscles to act. Friction, and the other means above recommended, are therefore to be chiefly relied on, for their good effects on this principle.

“ As the opinion I have advanced is somewhat new, I will offer a few further remarks, to shew that the excitement of respiration is a secondary consideration in the resuscitation of infantile life ; and on what account I question the propriety of breathing into the lungs of a child, until it is evidently living by the circulation : for if the true foetal life

life be extinct, by the perfect cessation of the circulation of the blood, I believe no means we can use, imitative of respiration, can ever cause it to pass freely through the lungs. The *sine qua non*, therefore, in recovering the life of the infant, is that which tends primarily to excite the action of the heart, and to renew the energy of that function, by which the foetus, before birth, had wholly existed.

“ As a proof of what I have advanced, it may be remarked, that the funis will always bleed some time before a *truly* still-born child begins to cry. This is the first effect of returning circulation. The next, is a glow of colour on the lips and countenance, along with which the sensibility of all the respiratory organs is excited: and it is then, and not till then, that the power of the atmosphere begins to act, and to occasion sobbing. Some advantage may, perhaps, then be obtained, from gently imitating respiration, by breathing once or twice into the mouth. But air, prematurely and violently forced into the lungs, can do no good; on the contrary, it will certainly do harm, if the action of the heart has entirely ceased: so that heat and stimulants have then less chance of promoting circulation, than when the lungs were empty. What good can their distension from air afford when the expiratory muscles are unable to throw it out again?”

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ART. III. *Remarks on some of the Opinions of the late Mr. John Hunter respecting the Venereal Disease; in a Letter to Joseph Adams, M.D. Physician at Madeira, Author of an Essay on Morbid Poisons.* By HENRY CLUTTERBUCK, Surgeon. Octavo. pp. 72. BOOSEY, London. 1799. Price 1s. 6d.

“ THE following are the chief points of Mr. Hunter’s doctrine of the venereal disease,” which the author examines in the pamphlet before us.

“ 1. That the venereal poison, being taken into the system,

system, becomes universally diffused, and contaminates at once all the parts which are susceptible of the venereal action; and that it is soon afterwards expelled the system, along with some or other of the excretions.

“ 2. That the parts contaminated do not immediately go into venereal action; but that they acquire a new state or condition, and which is termed by him, a *disposition to take on the venereal action*.

“ 3. That *disposition* once formed in a part, necessarily goes on, at some future period, to *action*.

“ 4. That mercury cures *venereal action*, but does not remove the *disposition* previously formed, and which is not yet come into action.

“ 5. That although mercury does not destroy the *disposition* already formed, yet that it prevents it from forming.

“ 6. That although the *disposition* continues, it does not go into action during the use of mercury.

“ 7. That the action, having once taken place, goes on increasing, without wearing itself out.

“ 8. That parts once cured never become again contaminated from the same stock of infection.

“ 9. That the matter of the secondary ulcers is not infectious.

“ 10. That the venereal action is as soon destroyed in a large chancre as in a small one, the mercury acting equally in all its parts.”

Mr. Clutterbuck admits, with Mr. Hunter, “ that the venereal virus, immediately on being absorbed, becomes universally diffused, and contaminates at once all the parts which are susceptible of venereal action; and that it is again soon thrown forth from the system, in some or other of the excretions. But still,” he thinks, “ a difficulty remains, in endeavouring to account for the interval which elapses between the time of absorption and the appearance of venereal actions. ‘ At this time,’ says Mr. Hunter,

Hunter, ‘ a venereal *disposition* is formed in the parts which
 ‘ are susceptible of the disease.’ But the immediate nature of this disposition he does not attempt to explain. It is clear, however, that he supposed it to differ from the natural and healthy state of the parts; and likewise from that of evident venereal action, in this very important point, that mercury has no power of removing it, but only of preventing its going into open venereal action, so long as the system is under the influence of this mineral; and that when the mercury ceases to operate, the tendency to venereal action remaining unimpaired, this action is sooner or later the certain consequence. The practical inference deduced from this doctrine by Mr. Hunter is, ‘ that we should
 ‘ push our medicine no farther than the cure of the visible
 ‘ effects of the poison, and allow whatever parts may be
 ‘ contaminated to come into action afterwards.’ P. 334.

“ The employment of the term *disposition*, by Mr. Hunter, has given rise to much controversy between the friends and opponents of his system. Not having himself defined it, it is not surprising that others should have disagreed in their use of it.”

By the term *disposition* Mr. Clutterbuck supposes “ a modification of action ” to have been understood, “ or some change in the actions of the part or constitution.” But, says he, “ the term in its ordinary acceptation implies no such thing, and seems therefore improperly used to express a state of morbid action. Assuming, however, that by *disposition* is meant a new action of parts, induced by the application of a morbid poison, it is desirable to ascertain the nature of this change, at least to inquire how far it is capable of being influenced by means of art.

“ It appears difficult to conceive, *à priori*, that the first action induced by the venereal poison, or what is termed *disposition*, should differ so essentially from the disease in its subsequent stages as to resist altogether the influence of mercury,

mercury, a substance which exerts so great and almost never-failing powers over the latter. The same stimulus, operating on the same part, in the same constitution, might be expected to produce a somewhat similar action. If we recur to analogy, we shall see that, in general, diseased actions are more easily superseded or removed at their commencement than after they have continued for a length of time, and become in a manner habitual."

Mr. Hunter's opinion seems "founded solely on the observation, that the secondary symptoms sometimes arise, notwithstanding a full use of mercury; this being not always sufficient to prevent their occurrence. That this is occasionally true, will be readily admitted by every one that is at all conversant with practice in this disease. The secondary symptoms shew themselves, and even recur again and again, where mercury has been carried to a considerable length. But that this is generally the case, founded on the principle laid down by Mr. Hunter, besides its improbability, does not seem to me established on the sure basis of experience.

"The opinion that mercury has no power over latent contaminations, except a suspensive one," the author suggests, "cannot be controverted by direct experiment, because the only proof of contamination which we can have, is the appearance of subsequent venereal actions. But though we cannot attain to certainty in this point, presumptive arguments are not wanting.

"If it were universally true, that mercury has no power of removing the venereal disposition, or, in plainer language, of destroying latent infection, cases of the secondary disease would, I think, be much more frequent than they are actually found to be. Absorption of virus probably takes place at an early period. At the very commencement of ulceration in chancre, the substance of the part itself is taken up, and there can be no reason to suppose the virus to resist the action of the absorbing vessels.

“ If we are to suppose with Mr. Hunter, that all the parts which are susceptible become at once contaminated, and mercury has no influence over them in this state, the constitution should become affected in almost all cases, for absorption probably always precedes the application of remedies. Either, therefore, mercury does prevent the future action, or a more frequent want of susceptibility to the disease must be supposed, than we have any grounds to imagine exists. That there is occasionally a want of susceptibility to the impression of the venereal virus, is true of this, as of most other poisons. But Mr. Hunter did not suppose it to be a frequent occurrence. The number that would escape the constitutional disease, if no mercury were employed, is stated by him as extremely small.

“ Notwithstanding this, however, I shall digress so far as to observe, that the want of susceptibility to the constitutional disease is, perhaps, more frequent than has commonly been supposed. The different susceptibilities of different persons, with regard to the primary symptoms, are well known. Some appear to be nearly, or altogether, callous to infection. On the other hand, the frequency with which chancres are healed *by external applications alone*, or at least with a very sparing use of mercury, together with the long interval that occurs in many cases, between the first appearance of the chancres and any affection of the groin, serves to convince me that there is also a frequent want of susceptibility for the constitutional disease.

“ From the different periods at which we observe the glands of the groin to become affected, it would seem, that contamination does not always take place immediately on the poison being applied; but that a long and frequent application is often necessary to produce the specific impression. On this supposition we can account for the many cases of chancre which are cured *by local means*, without being followed by the constitutional symptoms.”

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The author goes on to remark that “ whilst we are so much in the dark respecting the susceptibility of the system, or its different parts, we can judge very imperfectly of the effects of remedies; and our judgment of the truth of Mr. Hunter’s opinion can only be formed by a consideration of all the different circumstances. Though the occasional reappearance of the symptoms gives a colour of probability to the notion, that mercury does not remove latent contamination, it is yet not conclusive; for the fact may be otherwise accounted for.

“ In the first place, it is not one of frequent occurrence. From my own observation I should say, and the opinion is not singular, that when mercury is carefully employed, and its action kept up for a considerable length of time, the secondary symptoms will very rarely appear. In the greater number of instances of the secondary disease, which have occurred to my observation, I have been able to ascertain that mercury had been employed in a superficial manner, either from carelessness in the patient, or from a preconceived theory in the mind of the practitioner. ‘ The venereal action,’ Mr. Hunter observes (p. 241,) ‘ is just as soon destroyed in a large chancre, as in a small one; for every part of the chancre being equally affected by the mercury, is equally easily cured.’ On this principle I have known practitioners push the mercury vigorously, till a considerable affection of the mouth was produced, and then suddenly discontinue it: under this treatment the chancre will often heal. Sometimes, too, it has happened unexpectedly, that the mouth has been so violently affected by a very small quantity of the remedy, that a further use of it became for some time impracticable; and the chancre having healed before the salivation had declined, it has not been judged requisite to recur to the use of mercury. In each of these cases I have observed the secondary symptoms to succeed. On such occasions, therefore, the recurrence

of the disease may be explained, without supposing a want of power in mercury to remove the latent contamination.

“ Does mercury act equally in the system? or is salivation a test of the whole having taken on a new action? This is a question of considerable importance in explaining the phenomena of the disease, and the facts respecting its cure.”—Mr. C. discusses this point at large, and answers his queries in the negative.

“ The great frequency of the secondary symptoms in the present day, and the numerous relapses which take place, are attributable,” in the author’s opinion, “ to the slight and superficial manner in which it has been *of late* the fashion to employ mercury. I know not,” says he, “ whether Mr. Hunter’s practice was of this kind, but I know that of many of his followers to be so; and, undoubtedly, it is a fair deduction from his principles. Upon the whole therefore,” continues the author, “ I am at a loss to consider what has been termed disposition in any other light than as the commencement of venereal action; not yet fully evolved, nor arrived to such a pitch as to influence visibly the structure or functions of the part: of course, that it differs from open venereal action in degree only, and not in nature and properties. With this opinion I should be induced to insist on a more rigid application of mercury in cases of chancre: not only with a view of preventing contamination, but of destroying such as had actually taken place. The appearance of the secondary symptoms, and the chance of relapse, as far as I am able to judge, are greatly determined by the length of time, and the degree to which the use of mercury is carried, in the treatment of the first affections.”

Mr. C. then inquires into the eighth opinion, given above; “ ‘ that parts once cured never become again contaminated from the same stock of infection.’ If by this is meant, that when the disease recurs after a careful employment

ployment of mercury, it is not in the same part, or order of parts; that is, that when the throat has been once attacked and cured, the skin is next the seat of the disease, and, after that, the bones: I must say, it is contradicted by my experience. It is true, that after chancre has been for some time healed, and all thickening of the part removed, we do not find ulcers breaking out on the genitals, which have the properties of chancre: it probably requires the recent matter of chancre to produce chancre. Nor do we find bubo in the list of secondary symptoms. But with regard to the throat, skin, and bones, the return of the disease on these parts, after a cautious use of mercury, and after a considerable interval, has been frequently observed." Five cases are here detailed in proof of this fact.

"In all these cases mercury was carefully employed, to a considerable extent, and persevered in for several weeks; yet the former symptoms recurred. This, it must be allowed, seems at first sight to favour the idea, that mercury does not remove the disposition, although it does the subsequent action. But, in my mind, it goes only to prove an inequality in the action of mercury, in consequence of which the venereal action is only partially removed, or suspended; the parts not being wholly under the influence of this mineral."

The author says farther, "I have seen cases which induce me to believe, that the venereal disease, in some of its stages, and in certain circumstances, may get well without mercury, or any other remedy. But this is contrary to the doctrine of Mr. Hunter, who supposed that venereal actions go on increasing, without any tendency to wear themselves out. That lues venerea is much modified by climate, and other circumstances, is generally allowed; that it has been cured by other means than mercury, we have also very sufficient evidence in the oldest writers on the subject; not to mention the late successful trials with acids,

and other substances. Many of the appearances on the skin go off spontaneously. ‘When purple spots appear on the skin,’ Mr. Hunter, p. 319, ‘giving it a mottled appearance in this disease, many of the spots disappear, whilst others continue and increase’.” A case is then given by the author, “to prove that venereal actions sometimes subside spontaneously, and again recur; or at least that they lessen to such a degree as to produce no evident effects.

“In this case we find the symptoms so slight and equivocal as to be readily overlooked, as to their origin. We find them disappearing and returning with the seasons, without the employment of the specific, or any other active remedy; and lastly, they are permanently removed only by a cautious and long-continued mercurial course.

“Thus it would seem, that the venereal disease, like many others, grows milder by duration; and there is little difficulty in supposing that the symptoms would at length, in some instances, after being repeatedly combated by mercury, subside of themselves altogether. In one form of the disease (gonorrhœa) we know this to be often the case. Something of this kind too appears to take place even with regard to chancres. ‘It often happens,’ Mr. Hunter observes, ‘that after chancres are healed, and all the virus gone, that the cicatrices ulcerate again, and break out in the form of chancres. They often have so much the appearance of chancres, that many are treated as venereal that are not such; they differ in not spreading so fast, nor so far; they are not so painful, nor so much inflamed, and have not the hard basis, nor do they produce venereal buboes. Yet a malignant kind, when they attack a bad constitution, may be taken for a mild kind of chancre, or a chancre in a good constitution. I have seen several that have puzzled me extremely.’—The only reason, then, for supposing these not to be venereal is, that they sometimes get well without mercury. But, if this proof is not
absolute,

absolute, and the resemblance to chancre is so striking as to have deceived even Mr. Hunter's penetrating eye, it appears to me the lesser difficulty to admit the sameness of their nature.

“ Another part of the doctrine of Mr. Hunter, on which I beg leave to offer a few remarks, is that where he asserts, ‘ that the matter afforded by the secondary ulcers is incapable of infecting; and, therefore, that the disease, in ‘ this stage, is altogether different from the former.’ If this be well-founded, all the parts which are susceptible, and which are ever observed to become diseased, must be contaminated at once by the matter afforded by the primary symptom of chancre or bubo, and without any relation or dependance on each other. Amidst the multitude of medical experiments, it is rather surprising that a point of this magnitude should remain yet undecided; a point too, which is so easily reducible to certainty. But so it is; for I cannot deem the experiments mentioned by Mr. Hunter as decisive; they are too few to warrant so general and important a conclusion.”

Mr. C. here endeavours (and we think with tolerable success) to refute the above opinion of Mr. Hunter. He observes, that “ a certain degree of concentration, and a certain quantity of infectious matter of any kind, are necessary to enable it to produce its specific effects. The variolous poison may be so diluted as to be harmless: and from the Abbé Fontana's experiments we learn, that *quantity* likewise influences the effects of animal poisons. The experiments of Mr. Hunter, therefore, only shew that the virus produced by secondary ulcers is less active than that of chancre, but do not go the length of proving a difference in quality, otherwise than in degree.”

The practical inference Mr. C. draws from his observations is this: “ we should not be content with the apparent removal of the present symptom, by perhaps a slight use of

mercury, according to the hypothesis of Mr. Hunter, but that our treatment should be as severe and long-continued, as is compatible with the general health and feelings of the patient; for the double purpose of removing evident symptoms, and, at the same time, of keeping up the mercurial action for such a period as we may judge requisite for the removal of the floating poison by the ordinary processes of the system. The length of time, indeed, required to effect this, we cannot precisely ascertain, but from experience of the disease it would seem that several weeks are necessary; for in less than this, relapses are frequently found to take place.

“ Mr. Hunter denies (p. 56) that the testis is attacked by the venereal disease, either in its primary or secondary stage. That the affection of this part, which takes place in gonorrhœa, is not venereal, is well ascertained, and generally allowed. But I have so often seen an enlargement of this part accompanying the secondary symptoms, and yielding, like them, to the use of mercury, where at the same time there was no stricture, or other affection of the urethra, to which the swelling might be attributed, that I can entertain no doubt of its making a part of the same disease.” — These remarks (in our judgment) are well worth attention, and founded on facts which cannot be discredited. Upon the whole, we agree with the author, that “ in Mr. Hunter’s doctrine of the venereal disease something has been sacrificed to system.”

Among the causes here assigned for the failure of mercury in certain cases of lues venerea, the following merit consideration:

“ Some persons appear to possess an extreme insensibility to the operation of mercury. Exhibited in every form and quantity, it is difficult, and for a long time impossible, to produce any visible effects from its use. In such cases the disease is difficult of removal. It is not easy to discover on
what

what this insensibility depends. It does not seem to depend merely on strength of body; for it takes place in habits widely different in this respect: nor is it referable to the general state of irritability; for there is no proportionate insensibility to the action of other *stimuli*. We are compelled, therefore, to refer it to some innate peculiarity of constitution, of the nature of which we are altogether ignorant. It is to the purpose, however, to remark, that in habits of great strength, the reduction of this, by bleeding or purging, renders the system in many cases more readily susceptible of the mercurial influence. Another cause of the failure of mercury is just the reverse of the former. Here it produces great and deleterious effects in the system; so that it often becomes impossible to prosecute its use for a length of time, and in quantity sufficient to effect a removal of the disease. Where mercury acts in this manner, it also seems to act partially; affecting some one part with violence, and others little, or not at all. Thus it is not only when purging is produced in a considerable degree, that mercury ceases to operate on the disease, but salivation itself, if rapidly induced, and carried to a great length, often appears to counteract the beneficial effects of the remedy. This disadvantage can only be obviated by a cautious administration, and by a careful attention to the local effects as they arise. It is proper to observe here, that the disposition to be affected in this violent manner by mercury, is produced, or greatly increased, by a want of necessary sustenance, and by great debility from any cause. The practical rule in this case is obvious. Again, the constitution, by frequent use, becomes habituated, in some degree, to the stimulus of mercury, as it does to that of other remedies; and thus its powers are diminished. This can only be remedied by occasional intermissions, or by the substitution of different forms.”—A case is detailed to illustrate this point, in which various modes of treatment were resisted by the disease in an extraordinary manner.

“ It

“ It appears to be essential, in a practical view, to admit the great possible deviation of the venereal disease from its ordinary course. From its variable character, and its complication with other diseases, or with symptoms that are foreign to it, it is liable, without considerable attention, sometimes to be overlooked. In more than one instance I have seen the existence of the disease denied, and the use of mercury prohibited, because the symptoms did not exactly correspond in their series and order with the doctrine laid down by Mr. Hunter. The venereal disease seems to me by no means to have lost its claim to the character which it has hitherto always possessed, of an *insidious and lurking enemy*. I have notes of a considerable number of cases, which, from their early and most prominent features, and from the length of time which had elapsed subsequent to any known infection, would not have readily been referred to a venereal source; but which were at length characterised by some unequivocal symptoms, yielding only to the specific remedy.”

The author very reasonably suggests, “ that many of the cases of disease communicated from nurses to infants, and *vice versa*, and those which follow the transplantation of teeth, as related at the conclusion of Mr. Hunter’s Treatise, and which he supposes to arise from a morbid poison different from the venereal, appear to be really instances of venereal infection; differing, indeed, from the more common forms of the disease, but still with no greater variety than is attributable to peculiarities in constitution, time, and mode of infection, &c.”—Other cases, somewhat similar, are likewise referred by Mr. Clutterbuck to a venereal cause.

“ If these cases differ in some points from the venereal disease in its ordinary state, they must be allowed to resemble it in many important respects. The symptoms very nearly resembled the common venereal ones: the progress was very similar, though not perfectly corresponding; and the method of cure further proves the analogy. There was nothing in the origin or commencement of these affections
which

which should lead one to doubt a venereal source. When we consider the situation and habits of life of those who have in general furnished the teeth for transplanting, that they have not only been indigent in circumstances, but of loose morals, we shall have no difficulty in conceiving many of them to have been contaminated. Admitting this to be the case, there are two ways in which it might be possible for the infection to be conveyed; either by matter from an ulcer existing at the time in the mouth or throat of the person from whom the tooth was taken, or by the blood or juices of the tooth itself, as partaking of the general contamination of the system. The first is rendered less likely, from the accurate examination which has commonly preceded the operation, as well as from the caution which has been used to wash off any adhering matter from the transplanted tooth. The latter supposition, though undoubtedly attended with difficulties, is not contradicted by any known law of the animal economy. It receives much support, indeed, from the well-known fact, of the contamination of the foetus in utero, both in syphilis and small-pox. In both these cases, there seems no other medium by which infection can be conveyed, than the blood of the mother carrying the poison through the placenta, from whence it is absorbed by the vessels of the child. The experiment, of inoculating with the blood of a contaminated subject, is said to have been made without success. But it is not one, nor twenty negative instances, that are sufficient to decide a point of this kind. Many circumstances might influence the event of an experiment besides the state of the system, or part, as to its susceptibility. With regard to hired wet-nurses, many of these are as liable to suspicion as those who have furnished teeth for transplantation. The difficulty of ascertaining facts in these cases is well known.

“ A source, therefore, from which the venereal disease might be derived in the cases above noticed, is sufficiently apparent;

apparent; and that infection might so arise must at least be admitted as possible. But I rest my strongest argument on the character and progress of the symptoms: and here we may adopt the maxim of Mr. Hunter himself, who says, ‘that if a disease is suspected to be venereal, though it is not perfectly marked, yet if it resembles the venereal in most of its symptoms, it must be supposed to be venereal, that being most probable, although it is by no means certain; for probably the venereal can hardly be demonstrated in any case, especially in the form of lues venerea, from its not having the power of contamination.’ (p. 380.) This, however, is inconsistent with what he observes just before, viz. ‘that when a disease resembles the venereal in some of its symptoms, but not at all in others, then those other symptoms are to be set down as the *specific*, or leading ones of the disease to which they belong.’ And again, (p. 387) ‘new poisons are rising up every day, and also very similar to the venereal in many respects, although not in all: therefore it is the *want of similarity* that is the criterion to judge by, and not the *similarity*.’ If this doctrine were admitted, the species of disease would soon be multiplied to an immeasurable extent. We should shortly have no standard character to which to refer.

“The records of medicine, I think, by no means warrant the conclusion, ‘that new poisons are rising up every day resembling the venereal in many respects.’ If it were so, it is strange that none of them have been perpetuated; at least so far as for their history and character to be accurately fixed. But the diseases which have been added to the catalogue since the earlier ages of medicine are not numerous, and their character is well ascertained. The truth is, that we have no account of diseases, such as have occasionally appeared of late, and which have been supposed by Mr. Hunter to be derived from new poisons, previous to the appearance of the venereal disease in Europe.

And

And I cannot but consider the silence of medical history in this respect, as evidence nearly decisive against their present existence as new specific diseases."

Mr. Clutterbuck has said very little "*on the use of the new remedies in the venereal disease,*" and indeed his subject did not require that he should say much;—but he concludes by observing, that "*their value will only be fairly appreciated when tried on a large scale.*"

X. Y.

ART. IV. *Recueil de Pièces relative à la Fièvre Jaune d'Amérique, envoyées par le Consul des Etats-Unis d'Amérique, à Marseilles, au Gouvernement des Etats-Unis. Quarto. pp. 59. Mossy, Marseilles. 1799.*

THE first paper contained in this collection, is a Letter from Timothy Pickering, Esq. Secretary of State, to Mr. Cathalan, jun. the Consul at Marseilles, dated Philadelphia, December 15, 1798, stating that the yellow fever had again appeared there, and was more fatal and malignant than it had been in 1797: 3,600 persons died during its three months prevalence, although three-fourths, or more, of the inhabitants, had left the city. Mr. Cathalan is therefore requested to obtain from the officers of health at Marseilles, an account of an establishment there for the prevention of the plague, which is said to be the most complete of the kind in Europe. A copy of this letter was accordingly sent to them, with a note from Mr. Cathalan, who in return received three copies of their regulations, the titles only of which are given in a letter from the officers of health to him, containing likewise some general remarks on the subject. Mr. Cathalan's letter in answer to Mr. Pickering, contains a number of regulations for preventing this fatal disease, such, however, as have been generally recommended on similar occasions. The principal are, the pro-

hibition.

hibition of pump water for any but external use ;—the removal of all persons attacked with the symptoms of the disease to a certain isolated district ;—the rigid observance of that mode of treatment which is found upon the whole most successful ;—the burial of the dead in quicklime at least five feet deep in the earth ;—careful purification of their clothing, furniture, &c ;—and the interruption of all communication with places infected by any similar disease, or indeed by any epidemic whatever.

In addition to this correspondence between Mr. Pickering and Mr. Cathalan, the present pamphlet contains a statement of facts, relating to this subject, which was presented to the Faculty of physic at Montpellier, and also to the physicians at Marseilles, for their opinions ; with the answers returned by each of these bodies. The statement, or, as it is intitled, “ *Memoire à consulter,*” recites, among other circumstances, that the disorder had not gained any considerable ground before the year 1793 ; although it was known, and had been well described by Dr. Linning, of Charlestown, in 1788. That about the year 1793, the population of Philadelphia was greatly and suddenly increased, so as to amount to more than 60,000 inhabitants. The climate is exceedingly cold in winter, the rivers continuing frozen for several months ; but the heats which come on toward the middle of June are very excessive, and remain till the autumn. Many towns in Maryland and Lower Virginia are marshy, and subject to agues ; but it does not appear that New York, Philadelphia, Boston, and places round about them, are so in as great a degree. South Carolina, Charlestown, and Georgia, are also situated in a marshy soil, and subject to intermitting fevers like the former, but not so much to the yellow fever : it, therefore, does not seem necessarily connected with those causes which produce intermittents. After the above-mentioned increase in the population of Philadelphia, it was found necessary to increase
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the number of privies, (*fosses d'aisance*,) and to dig more wells in the streets, which receiving the moisture from the privies, gave a bad quality to the water; for when these wells were covered in, the putrid miasmata arising from them were not able to fly off, but were absorbed by the water, which the people in general found it more convenient to draw from the pumps communicating with those wells, than to fetch it from the river. The Americans in general use nearly the same kind of diet as the English, but eat a larger proportion of animal food, salt-fish, and cheese. On this statement three questions are proposed: *viz.*

1. What regimen should be observed, especially in the spring, to guard against the disease?
2. What is the best mode of treatment under it, *cæteris paribus*?
3. What methods should be adopted to stop its progress and communication?

The reply to these questions by the physicians at Montpellier is judicious and pertinent. They begin by regretting the want of information in the memorial laid before them respecting the peculiar symptoms and characteristic marks of the disease, and many circumstances attending it which are necessary to be inquired into. They, however, give the following observations, on the points submitted to them:

1. On the first, they propose that the food should be light; that salt and smoked meats, and such as are at all tending to putrescency, should be avoided; wine and punch to be taken in moderation; a little wine to be taken in the morning, occasionally adding to it bark, or snake-root; and a careful attention to be paid to what are called the non-naturals.

2. With regard to the treatment, they observe, it must be regulated according as an inflammatory, catarrhal, or putrid disposition, may appear to predominate. Great attention is to be paid to the viscera, which appear most affected;

fected; indications of cure being often derivable from this source. As the liver appears to be much affected, and often inflamed, in this disease, they propose moderate bleeding in young and plethoric habits, and the application of leeches to the hæmorrhoidal veins; an emetic also to be given in the early stage of the disease, and followed by the saline draught of Riverius, in a state of effervescence. They also recommend fomentations to the epigastric region; vegetable acids; cupping-glasses to the region of the stomach, if the vomiting continues excessive; and arteriotomy in case of coma. Opiates are censured. When the sickness is removed, gentle laxatives are to be administered, and light aromatics, and diaphoretics combined with antiseptic medicines, or bark with sulphuric acid, as circumstances may require. The patients are to live on farinaceous food, or broths, with mild acids, or weak wine and water. The air of their apartments to be kept cool, and sprinkled with vinegar and water. Cascarilla may be burnt occasionally toward the close of the disease. The greatest cleanliness is to be observed, and the patient's mind to be cheered with consolatory expectations.

3. The method recommended to stop its progress consists principally in the separation of the infected, shutting up all the hospitals in the town, and building barracks of spruce-wood for the sick on a dry soil, at a distance from rivers, and where they can be well defended from southerly winds. Fires are directed to be frequently lighted in the streets; the old privies are to be filled up, and others opened at a convenient distance.

The reply of the physicians at Marseilles agrees in general with that of the faculty at Montpellier; it will therefore be unnecessary to give a particular account of it.

English translations of several of the letters in this collection are printed on opposite columns; but, in general, they are very badly executed.

N.

ART.

ART. V. *Notice of some Observations made at the Medical Pneumatic Institution.* By THOMAS BEDDOES, M. D.
Octavo. pp. 46. LONGMAN and REES, London. 1799.
Price 1s. 6d.

“AT length,” says Dr. Beddoes, “after some disgusts, and much delay, we have it in our power to announce the first proceedings at the Establishment, for applying chemistry to the elucidation of animal nature, principally by pursuing the connexion between the properties of elastic fluids and the conditions of life. By such an investigation, the public has been already too often told how much I consider it as practicable to advance *physiology*, the most interesting of the sciences, and *medicine*, the most useful of the arts. Intimately persuaded that immense improvements must, sooner or later, result from the inquiry, provided Nature be consistent with herself; and nothing doubting the truth of this, the fundamental postulate of all philosophy, I felt little discouraged by failures, which the presumption of sciolists has often busied itself in representing as decisive. For who would suffer himself to be turned prematurely aside from an useful pursuit, by reptiles that plant themselves on the high road of improvement, and try to hiss back all who would advance? Nor has the intelligent part of the public, I believe, been induced to regard as finished that which could not properly be said to be begun. For myself, among a multitude of reports, that prove nothing beyond the safety of the research, observing some far more favourable than could be expected from the excessive disproportion between the means hitherto employed and the end in view, I incessantly persevered in urging the execution of the design.

“To have engaged in it, however, either without a sufficient fund, or the most able assistance, would have been to do a good cause the most lasting of injuries, supposing

(what I have long sincerely believed,) that extensive benefit may result from the undertaking. The qualifications of a superintendant were, indeed, of still greater importance than the amount of the subscription. In some hands, the largest sum would have been utterly unproductive. And the acquisition of a properly qualified associate might be considered as more than virtually doubling the fund; since it is the prerogative of superior talents to accomplish great purposes by small means.

“ A superintendant, equal to my wishes, and superior to my hopes, being at length secured, the best method of opening the institution became the next object of consideration. It appeared the most prudent to wave the use of gases for a time, and to confine ourselves to the administration of common remedies. Without conciliating that class from which we were to draw our patients we could make no progress, and we wished not to exhibit ourselves as experimenters animated by that spirit of boyish wantonness, which pays no regard to the faculty of feeling in man. The number of invalid paupers that have resorted to us, shews that we were not mistaken in these views; and while it afforded an opportunity of trying the effects of digitalis, and other substances, which we supposed might possess similar virtue, on a very extensive scale in consumption, and of verifying, perhaps of essentially improving, the new treatment of syphilis, it constantly afforded us the choice of patients, who could have no hope from common remedies, and by consequence might be fit subjects for the factitious airs. Meanwhile there was a chance that among the possible medical applications of these agents, some one would occur as particularly worthy our minutest attention.

“ This has actually happened. Certain circumstances belonging to the gas, denominated by its great discoverer, Dr. Priestley, *dephlogisticated nitrous gas*, engaged Mr. Davy's attention. After making some experiments, which proved that

that its composition, properties, and mode of action, had been mistaken by the latest experimenters, he was induced to respire it in small quantities mingled with common air. In these first trials he thought, without fixing his opinion, that it acted as a depressing power; and I had communicated his suspicion to Mr. Watt. Dissatisfied with the result, however, he at last ventured to breathe it pure. The first inspirations of the gas produced giddiness, fulness of the head, and, in short, feelings resembling those of incipient intoxication, but unaccompanied by pleasurable sensation. At this next experiment I was present. The quantity was larger, and the gas more pure. The scene exhibited was the most extraordinary I had ever witnessed, except in the case of that epileptic patient, whom I have described (*Considerations on Airs*, part iv. p. 13,) as agitated, in consequence of the respiration of oxygen gas, with a long succession of the most violent movements. The two spectacles differed, indeed, essentially in one respect. In the former, every thing was alarming: in the latter, after the first moments of surprise, it was impossible not to recognise the expressions of the most ecstatic pleasure. I find it entirely out of my power to paint the appearances, such as they exhibited themselves to me. I saw and heard shouting, leaping, running, and other gestures, which may be supposed to be exhibited by a person who gives full loose to feelings excited by a piece of joyful and unlooked-for news. As in the case of the epileptic patient, *no weariness or depression followed*: so in this case, *no exhaustion, or languor, or uneasy feeling took place*. The experiment Mr. Davy has very frequently repeated, and generally with the highest pleasurable sensations, and, except under particular circumstances, with considerable muscular exertion, which have not in any instance been succeeded by fatigue or sadness.—Since that time, a number of persons have inhaled the same gas," and with very similar effects.

“ From many hundreds of experiments, we have also now acquired an idea of the dose suitable to different temperaments. But there was a time, when, for want of such knowledge, the results were less agreeable than might have been wished.”

Dr. Beddoes then states the trial of this gas on about twenty persons, in all of whom it produced exhilarating effects, with increased power of muscular exertion. It appeared, however, to act much upon the nervous, but very little on the sanguiferous system; so that the author was encouraged to try it on paralytic patients, and with great success. He further informs us, that in the communication of the full experience of himself and his colleagues, neither unnecessary delay nor reserve shall take place. They propose to send it abroad along with other matter, in a periodical work, to be entitled, *Researches concerning Nature and Man*. After the first number, which they hope will appear in less than three months, the publication will come out quarterly. The first number will consist of a *paper on the philosophy of medicine, by the author of this notice; of part of a vast chemical investigation, connected with the gas so often mentioned, and including its history, by Mr. Davy; of an account of the cases in which it shall have been used; of an account of their experience in phthisical cases, by Dr. Kinglake—together with some communications.*

“ A compound has occurred to Mr. Davy, which seems to possess antisymphilitic powers superior to the substances lately so much brought into question. But the account of its effects will probably be deferred to some future number. Meanwhile, we shall try it with great hope, in the worst *secondary venereal cases, and in various others.*”

Some other objects in view are hinted at; and this whole pamphlet certainly deserves the attention of the public.

* * * Among our MEDICAL REPORTS for the present month, is a letter from Dr. Beddoes, intimately connected with the subject of this essay.

Q.

ART.

ART. VI. *Memoirs of the Medical Society of London, Vol. V.*

(Continued from p. 121.)

Art. 13. *Observations on the Wigglesworth Water.* By T. GARNETT, M. D. C. M. S. &c. Physician at Harrogate.

WIGGLESWORTH is about five miles from Settle, in Yorkshire.

“The water in the sulphur-well appears to have a blackish tinge, but when taken up in a glass is perfectly clear and transparent; it has a strong hepatic or sulphureous smell, similar to bilge-water, or the scourings of a gun; or to the celebrated sulphur-water at Harrogate. It has a bitter saline taste, though weak; and when suffered to stand in considerable quantity, the surface exposed to the air is soon covered with a white or yellowish film, owing to the decomposition of the sulphurated hydrogen gas by the oxygen of the atmospheric air. From the experiments which I made, it appears that this water is impregnated with Epsom salt, or *sulphat of magnesia*, in the proportion of seventy-five grains in a gallon. A wine gallon likewise contains twenty-one cubic inches of aërial fluids, of which seventeen consist of *sulphurated hydrogen*, or hepatic air, with a small portion of fixed air, or *carbonic acid*, and the remaining four of *azote*.

“Hence it is evident, that this water differs from the sulphur-water at Harrogate principally in containing a much smaller quantity of saline matter, being impregnated with similar aërial fluids, though in somewhat smaller quantity. The whole quantity of saline matter contained in the Wigglesworth sulphur-water is only 3 dwts. 3 gr. whereas the same quantity of the sulphur-water at Harrogate contains no less than 1 oz. 11 dwts. 10 gr.”

14. *Observations on the Nature and Virtues of the Harrogate Waters.*

Waters. By T. GARNETT, M. D. C. M. S. &c. Physician at Harrogate.

This is a very interesting paper. The nature and virtues of Harrogate waters have hitherto escaped the attention of chymists, and medical men in general are wholly ignorant of their exact composition. The mineral waters at Harrogate, Dr. Garnett informs us, are numerous, “ but may, in a general way, be divided into two classes; *sulphureous* and *chalybeate*. Of the former, there are some which are strongly impregnated with sulphurated hydrogen and other gases, and which also contain a considerable portion of neutral salts: there are others impregnated with the same gases, which contain a much smaller portion of the same, and different saline matters; and others again which possess the sulphurated impregnation, without any sensible, or at least considerable, portion of saline substances.

“ The chalybeates are of various degrees of strength, consisting generally of iron suspended by fixed air; but we have one in which the iron is united to the muriatic acid, which is very uncommon. I have lately discovered a chalybeate water not far from the sulphur-wells, which will be very convenient for the company at Low-Harrogate, and which seems full as strong as the chalybeates at High-Harrogate.

“ The waters most in use are the sulphur-wells at Low-Harrogate, containing a strong saline, as well as sulphureous impregnation; the chalybeates at High-Harrogate, viz. the Tewit well and Old Spa, and the Crescent water at Low-Harrogate, which is of a middle nature, being both sulphureous and chalybeate. The contents in a wine gallon of each of these waters may be seen in the following table.

A TABLE

Exhibiting the Contents, in a Wine Gallon, of each of the Harrogate Waters.

NAMES of the WATERS.	Specific Gravity.	Cubic Inches.			Grains.								
		Carbonic acid gas.	Azotic gas.	Hepatic or sulphurated hydrog. gas.	Muriat of soda.	Muriat of lime.	Muriat of magnesia.	Carbonat of lime.	Carbonat of magnesia.	Carbonat of iron.	Sulphat of magnesia.	Sulphat of soda.	Sulphat of lime.
Sulphur Water.	1,0064	8	7	19	615,5	13	91	18,5	5,5	—	10,5	—	—
Crescent Water.	1,002	20,8	—	13,6	137	—	45	3,1	—	2	8	—	—
Tewit Well.	1,00017	16	5	—	—	—	—	—	—	2,5	—	—	4
Old Spa.	1,00014	15,75	4,25	—	—	—	—	—	—	2	—	3	1,5
St. George's Spa.	1,00012	13,5	3,5	—	—	—	—	—	—	2	—	—	4,5

“ Though the water which is most used is the sulphureous saline water, the analysis of which stands first in this table, yet, on account of the large quantity of salt which it contains, there are some invalids with whom it will not agree. In these cases, I have generally recommended the waters simply impregnated with sulphurated hydrogen gas, which seldom disagrees with the most irritable stomach, and which answers every intention to be expected from the sulphur-water in common use, except acting as a purgative. I have found some patients, though but few, afflicted with herpetic eruptions, who could not, on account of the great irritability of the skin, bear the common sulphur-water applied as a warm bath. Such patients have used the simple sulphurated water, without experiencing the irritation which arose from the salts in other water.

“ It will appear from the table, that these waters contain a considerable portion of azotic gas, which has escaped the attention of other chemists who have attempted to analyze them, owing to the imperfect knowledge which they then had of the properties of this elastic fluid; for it is only lately that we have obtained any accurate notions concerning it.

“ With regard to the medicinal properties of the *sulphur-water*, it may be observed, that the salts with which the water commonly drank is impregnated render it a mild purgative; it passes off quickly and easily, seldom occasioning the least pain in the bowels: hence it may be used either as a powerful evacuant, or as a gentle laxative. Its impregnation with hepatic air renders it one of the most powerful remedies in cutaneous complaints, that we are acquainted with.”

15. *An Account of Experiments performed with a View to ascertain the Effect of the nitric Acid upon Iron deposited in the Stomach of an Animal.* By EDWARD HARRISON, M.D. &c.
From these experiments we learn, that seven cast iron

nails, weighing ninety grains, were stuck into a piece of liver, and swallowed by a dog. For several days nine drachms of *diluted nitric acid* were given to it, at several doses, and repeated for six days; so that the dog took seven ounces and six drachms of diluted nitric acid in that time. The dog was then killed, and upon a very careful and minute examination two nails only were found. It is, therefore, presumed, that the rest were destroyed by the action of the nitric acid.

16. *A Case of Iron Nails dissolved in the human Stomach, by means of the nitric Acid, without any bad Consequences.* By E. HARRISON, M. D. &c.

George Hall, aged twenty-three years, incautiously swallowed (the day before he complained) two cast iron nails, about an inch in length, with large heads and very sharp points. He had pricking pains in the stomach, but in other respects was in a good state of health. Dr. Harrison ordered him the *nitrous acid*, diluted in the proportion of one drachm to an ounce. Two drachms of this were directed to be diluted in a spoonful of water, and taken seven times in the day. Tincture of opium was added in consequence of its griping. In the course of six days he took seven ounces, five drachms, and twenty drops of the medicine. On the third day he was suddenly seized with convulsions, and an abolition of sense. Upon his recovery, he said that the nail had left his stomach, and that he was sensible of its motion towards the anus. One of the nails was afterwards voided by stool. It was very rough and uneven, and had several deep holes in various places; the small end was quite consumed, and the head much wasted. Great attention was paid to the examination of the fæces, but the other nail was never detected. Eructations of air constantly followed the exhibition of the medicine.

17. *An Account of a scirrhus Pylorus.* By Dr. J. E. HARRISON, of Philadelphia.

The usual symptoms of this disease preceded the death
of

of the patient. Upon examination, two damson-stones were found impacted in the scirrhus pylorus.

18. *A Case of Fistula in Ano from an uncommon Cause.* By E. HARRISON, M. D. &c.

The extraordinary cause here alluded to is the core of an apple or pear, which came away in the dressing, on the third day after an operation.

19. *The Cases of two Children who received the Small-pox by Inoculation without previous Inflammation round the Incision; with a few Observations on that Disease.* By THOMAS WHATELY, Surgeon.

“From these two cases,” says the author, “I think it may be safely concluded, that there is a possibility of the small-pox being communicated by inoculation, without any inflammation being excited in the part through which the variolous matter was received into the constitution; and although I am well aware that no great practical use can be made of this discovery, it is however of some importance that we should notice every different variety in the operations of nature. Something analogous to this I have several times seen in the venereal disease, where buboes have appeared without external sore or gonorrhœa; and I have seen some cases, when it seemed pretty certain that venereal virus had entered the system, without the least appearance of previous bubo, or any topical affection.”

20. *Cases of Cynanche Trachealis, successfully treated; with Observations on that Disease.* By HENRY FIELD, Apothecary, Sec. M. S.

This article is highly important, and contains many interesting practical remarks. Since the publication of the fourth volume of the Society's Memoirs, (in which we are informed Mr. Field was honoured with a medal for an excellent paper on this disease,) the author tells us that five cases of croup have fallen under his observation, four of which have terminated favourably.

“Case 1.—I. B. a stout healthy boy, of the age of five years,

years, had laboured near a fortnight under symptoms of cold, but not in a degree sufficient to give any alarm to his parents, until Sunday, November 9, 1794, on which day he walked about a mile to the house of a relation, where he became feverish, and his cough (some degree of which had been perceived several days) increased considerably, accompanied with a kind of sound, which induced his female relations to suppose that the whooping-cough was coming on; however, he was not at that time ill enough to prevent his walking home in the evening. The next day, Nov. 10, he was in every respect much worse. In the evening, being sent for, I found him labouring under a considerable degree of *pyrexia*, pulse 140, breathing very quick and laborious, cough frequent, and croup-sound very audible, throat somewhat inflamed, but without ulceration or incrustation, tongue white and much furred. Between four and five ounces of blood were immediately taken from his arm, a large blister was applied to the *sternum*, considerably below the seat of the disease, and one grain of ipecacuan, with six drops of tincture of squill, was directed to be given every six hours. Nov. 11. He has slept much at intervals, pulse 140, respiration somewhat easier, with less sound; he has vomited twice, and brought up much viscid mucus, but has had no stool, the throat less inflamed, and free from slough; he sweat much during the night, the blood drawn from the arm was natural in its appearance. The same medicines were continued, and he has drank plentifully of linseed-tea, with honey and lemon-juice. Nov. 12. Has vomited several times since yesterday the same kind of viscid mucus, respiration freer, cough frequent, but not accompanied with much noise, pulse 130, skin moist, and throat less inflamed; he continues to drink freely; having had but one stool since yesterday morning, a laxative medicine was ordered, and the other remedies persisted in, with a small diminution of ipecacuan. Nov. 13. The vomiting

vomiting has ceased since yesterday, respiration nearly the same, as is likewise the cough, with but little of the croup-sound; an eruption resembling the measles appeared on the skin this morning. Nov. 14. The measles were now full out upon him, respiration became easy, cough frequent, but free from shrillness, fever and every other unpleasant symptom abated. From this time every appearance of danger ceased, the measles ran their usual course, and the patient gradually recovered.

“ *Case 2.*—W. A. aged about five years, a weakly delicate boy, was in perfect health until November 12, 1795, in the evening of which day he was suddenly attacked with fever, cough, and difficulty in respiration. Being immediately requested to visit him, I had no doubt in considering his disease as the *cynanche trachealis*, the croup-sound being present in a considerable degree. Four ounces of blood were instantly taken from his arm, and the following medicine directed to be given him, viz. R̄ Calom. pp. gr. vj, Pulv. antimonial. gr. j. F. pulvis in iv chartulas dividendus, quaram capiat unam quartâ quâque horâ. Nov. 13. The patient was almost immediately relieved by bleeding, and passed an easier night, than from the violence of the attack could have been expected; every symptom was much abated, and the medicines were continued, with the omission of half the quantity of calomel. Nov. 14. No aggravation of the disease had occurred; on the contrary, from this time the amendment was gradual and progressive, and the child in less than a week restored to health.

“ *Case 3.* S——, a female child, aged eighteen months, was attacked with the croup late in the evening of Tuesday, June 21, 1796. The parents having had the misfortune to lose a child in the same disease about a year before, were presently aware of the dangerous nature of it, and applied for assistance that night, when a vesicatory was laid to the pit of the stomach, and tartarized antimony exhibited in sufficient
quantity

quantity to excite vomiting, proper attention being at the same time given to the state of the bowels. I visited the child for the first time about ten the following morning. The symptoms of the disease were clearly marked; considerable *pyrexia*, cough, difficulty of breathing, and crouping noise. Two ounces of blood were immediately drawn from the arm, by which the patient was greatly, and almost instantly relieved. Tartarized antimony, in doses of one-eighth of a grain, was given every three hours, and the following embrocation directed to be applied to the throat, by means of linen cloths, wetting them so frequently as to keep them continually moist, viz. R spt. æther. vitr. comp. —Aq. ammon. acet.—Aq. puræ, āā ʒj. M. The whole of this was consumed in the space of about twenty-four hours: vomiting was excited by the antimony once or twice, and one stool procured. A gradual mitigation of the disease continued until the evening of the next day (Thursday 23d June,) when a considerable exacerbation of symptoms took place, the crouping-cough and difficulty of respiration greatly increased. Three leeches were then applied to the *sternum*, the antimonial given in an emetic dose, and the other remedies continued. These means were attended with the desired success, an alleviation of the disease was again obtained, and the next day (Friday,) she appeared to be in so fair a way of recovery, that the embrocation and antimonial medicine in small doses were directed to be continued as at first. On Saturday there was a considerable *pyrexia* and heat, and, at the same time, much languor; she coughed frequently, with a slight degree of crouping: having had no stool since Thursday, an opening medicine was administered in addition to the former plan of treatment, which was still persisted in. Beef-tea was now allowed, her diet having been hitherto confined to barley-water, milk, and simple diluents only. After this time nothing occurred deserving particular notice; the disease

ease gave way gradually, although slowly, it being ten or twelve days before the cough entirely left her.

“ *Case 4.* — S. a sister of the last mentioned patient, about eight years of age, was attacked, on Monday 27th of June, with the same disease: the symptoms in this case were slight when compared with the former, but, nevertheless, quite sufficient to ascertain it, even if it had not followed so soon after the other, and in the same family; and, indeed, it is more than probable, that the very early application of remedies, by arresting the progress of the disease in the very first stage, was no small cause of its mildness. Venesection was directly performed; but the quantity of blood procured that way being small, and judged insufficient to answer the purpose proposed, it was followed by the application of six leeches; a quarter of a grain of tartarized antimony was given every four hours, and an emetic of the same nature as the former, but stronger, was made use of, and in the same manner, viz. R Aq. ammon. acet. ℥ij, Spt. æther. vitr. comp. ℥j. M. The patient was so much recovered by the next day, that no other alteration was judged necessary in the remedies, but the addition of a little rhubarb as a gentle laxative. The same plan was pursued two or three days longer, and a perfect cure ensued.”

Previously to entering upon those practical observations which are designed to accompany these cases, Mr. Field premises a few remarks on the different kinds of disease which have been known under the general name of croup, and also on the nature of the malady as to contagion.

“ The spasmodic croup,” says he, “ always attacks suddenly, and usually in the night. The attack of the inflammatory croup is sometimes equally sudden, but more generally gradual, being preceded a few days by slight feverish symptoms, and a teasing short cough, not however sufficiently important to create the smallest uneasiness in the friends

friends of the patient. The spasmodic croup often intermits; and in these intervals, both the respiration and the cough, if any exists, are free from its usual characteristic sound; the inflammatory, on the contrary, when once completely formed, never intermits so as entirely to lose its distinguishing marks, particularly in coughing; add to which, the heat, frequency of pulse, and other symptoms of *pyrexia*, are found in the latter in much greater degree than in the former. Dr. Rush has mentioned several other marks of difference, but as they apply chiefly to the effect of remedies, and to the later stages of the disease, it is not judged necessary to insist upon them here, it being in the first attack of this malady that a due discrimination becomes so extremely important, that being the time in which the application of powerful and decisive remedies is most conducive to the relief of the afflicted, a delay of a few hours being frequently the cause of irreparable injury.

“ Every author that I am at present acquainted with has denied this disease to be of an infectious nature. In a former paper on this subject I have taken the liberty to suggest my doubts as to this opinion being well founded, for which I have there assigned reasons; since that time my particular attention has been given to that point, and I am sorry to add, that increased experience has tended to confirm me more strongly in the opinion, that the true *cynanche trachealis* is a contagious disease. I have since met with repeated instances of its occurring in the same family, and that after such an interval as we most usually find contagious diseases to require in order to produce their morbid effects, namely, from six to ten days: whether the above opinion be well or ill founded, I would strongly recommend to practitioners to avoid the danger of communication, by requesting that every child may be removed, if possible, from the same house; or, at all events, be prevented entering or coming near to the sick chamber.

“ It

“ It has been said that this disease has occasionally been met with in adults ; when this has been the case, I am very much disposed to think that it was not the inflammatory, but the spasmodic, croup ; in confirmation of which opinion, I have never heard of its having proved fatal to them.

“ The first and most important curative indication in the treatment of the true or inflammatory croup (for to this our present observations will be confined) is to diminish the quantity of blood. In the paper on this disease, which the Society have done me the honour to publish in their *Memoirs*, I gave a caution against the use of the lancet, from an apprehension that the early debility, which had been observed to come on, would render general bleeding an unsafe and improper practice, and that our evacuation of blood should be only topical by means of leeches ; which, however, was advised to be freely and vigorously pursued. Since that time I have had opportunities of observing that the lancet may not only be safely, but even advantageously employed ; and that it should never, therefore, be omitted, when medical advice is required in the earlier stages of the disease, from two to four or five ounces of blood being taken away, according to the age and strength of the patient : much caution is, nevertheless, requisite in repeating this operation. If any abatement of symptoms takes place after the first bleeding, which frequently happens, I should certainly think it unnecessary to repeat that evacuation ; but if an evident exacerbation should afterwards come on, it will be generally proper to do so : in this case a topical discharge, by means of leeches, appears to me much to be preferred to a general one. Allow me here to give a caution relative to the prognosis in this disease. The means now recommended in the early stage of it being frequently followed by a considerable and very flattering appearance of recovery, the practitioner may be so far deceived, as to be encouraged himself,

himself, and, in consequence, to encourage the friends of the patient with great expectation of a favourable issue; but in this he cannot be too much on his guard, nor should he consider the danger to be past, until three or four days have elapsed without a return of symptoms, by which time the patient will have made considerable progress towards recovery.

“ Our next subject will be an inquiry into the use of blistering in the cure of this disease. I have on a former occasion taken notice of Dr. Home’s objection to the early application of blisters to the affected parts, as liable to do injury by their immediate stimulus. I am well satisfied, from later observations, that this objection is well founded, although sufficient attention does not seem in general to have been given to it; and whoever considers the extreme vicinity of the diseased part to the external surface of the throat, must surely coincide with me in opinion, that the application of a blister immediately to the part must act as a local stimulus, and therefore must increase rather than diminish inflammation. Vesicatories should for these reasons be either entirely omitted, or else applied only to distant parts. Whether they will in the latter case be of any service, I am at present unable to ascertain. Blisters were applied in only two of the present cases, and in those there is not the smallest reason to suppose that they contributed in any degree to the cure: in the last of the two the blister scarcely took any sensible effect on the skin.

“ The situation of the trachea with respect to the external integuments, which I have above alluded to, suggested to me an idea, that refrigerating, and also sedative remedies, might be used externally with advantage. In the third and fourth cases now recited, I made trial of an embrocation with that intention; how far the success of those cases is to be attributed to this remedy, it is impossible to say: it is sufficient, however, to enable me to recommend this and

similar applications to further trial, and also emollient and sedative cataplasms and fomentations. The occasional use of emetics so as to produce their full effect, and their constant use so as to excite nausea, as far as has hitherto appeared, seems to be attended with good consequences. The body should be kept at all times in a soluble state, but any considerable evacuation by stool is better avoided; its immediate tendency being to debilitate, without apparent advantage, in relieving the patient. The warm bath, either partial or general, may be employed with probability of benefit."

A. D.

(To be continued.)

ART. VII. *A Compendium of Anatomy; or, a Pocket Companion for Students in Surgery, and the Arts of Designing, Painting, and Sculpture: illustrated by twelve Plates; in which the Bones and Muscles of the human Body are represented as they appear in the best chosen Attitudes, when cleared of the Skin, adipose Membrane, Veins, and Arteries; accurately delineated from the most approved Tables and Figures extant: with a concise, yet clear, Explanation of their respective Names, Origins, Insertions, and Uses.* Fourth Edition, improved and enlarged. 12mo. pp. 32. SYMONDS, London. 1799. Price 2s. 6d.

THIS elementary performance may serve as a convenient manual, for refreshing the memories of young artists and anatomical students; and will form a proper companion to Mr. Townsend's *Physician's Vade Mecum*, of which we gave an account in our fifth number.

"The former editions of this work," says the publisher, "having been chiefly designed for artists, related only to the skeleton and external muscles; but the utility of it, and the rapid sale among surgeons as well as artists, have induced

duced him to make it more advantageous to both professions, by giving four additional figures, which shew the front and back view of two other layers of muscles, more deeply seated.

“ All the figures are from one or other of those well-known anatomical works of Albinus, Cowper, and Vesalius; except the first of the muscles, which is from an original drawing made by the late Mr. A. Walker, of the figure dissected by the celebrated Dr. Hunter, for the Academy, (at that time in St. Martin's Lane,) before the mould was taken, in which the figure now at the Royal Academy was cast; and they have all been correctly examined and compared with the best anatomical figures.” X.

ART. VIII. *Surgical Tracts; containing a Treatise upon Ulcers of the Legs; together with Hints on a successful Method of treating some scrophulous Tumours, the mammary Abscess, and sore Nipples of lying-in Women; Observations on the more common Disorders of the Eye, and on Gangrene.* The third Edition, revised and defended. By MICHAEL UNDERWOOD, M. D. Physician to her Royal Highness the Princess of Wales. 8vo. pp. 323. MATHEWS, London. 1799. Price 6s.

WE are happy to see a republication of these valuable tracts. In the preface to this edition Dr. U. notices the works of Mr. Baynton and Mr. Home in a very handsome manner, but thinks the latter gentleman entertains a less favourable opinion than might have been expected of the plan of treatment our author recommends, not without additional vouchers to its success. Mr. Baynton's method of applying adhesive plasters Dr. U. thinks may on various occasions become an useful auxiliary to his own, in many sores of a moderate size, particularly near the ankle, and in those attended with varicose veins; and intimates that he has himself seen the utility of this practice.

We cannot but strongly recommend Dr. Underwood's book to all surgeons, and especially to students, whose minds are not yet warped by old and frivolous prejudices.

P.

ART. IX. *A Treatise on the Diseases of Children, with Directions for the Management of Infants from the Birth.* By MICHAEL UNDERWOOD, M. D. Licentiate in Midwifery of the Royal College of Physicians of London, Physician to her Royal Highness the Princess of Wales, and senior Physician to the British Lying-in Hospital. In three volumes. The fourth Edition. 12mo. MATHEWS, London. 1799. Price 9s.

THE merit of this work is so well known to the public, that we need do no more than announce the present edition. Indeed we have only to observe, that it appears to contain several useful additions.

P.

ART. X. *A Treatise on Febrile Diseases; including intermitting, remitting, and continued Fevers; eruptive Fevers; Inflammations; Hæmorrhages; and the Profluvia. In which an Attempt is made to present at one View whatever, in the present State of Medicine, it is requisite for the Physician to know respecting the Symptoms, Causes, and Cure of those Diseases.* Vol. I. By ALEXANDER PHILIPS WILSON, M. D. F. R. S. Ed. Physician to the County Hospital at Winchester, Fellow of the Royal College of Physicians, Edinburgh, &c. 8vo. pp. 685. CADELL and DAVIES, London. 1799. Price 12s.

THE author of this very valuable treatise, which, (from the information it contains, as well as the perspicuity and judicious

judicious arrangement of its contents,) must supersede all former works on the subject, informs us that he paid particular attention to febrile diseases, in order to qualify himself for reading lectures on them, which he did in the summer of 1796 at Edinburgh. A very infirm state of health, however, obliged him to abandon the plan of continuing to give lectures: he has therefore laid the result of his studies before the public. With regard to the extent of this work, Dr. Wilson is inclined to think that five volumes will comprehend the whole of his plan: in the second, and part of the third volume, the first part will be finished, that which treats of idiopathic fevers; and the second part, which treats of the symptomatic, will form the remainder of the third and two last volumes. The present volume, however, forming a treatise on intermittent, remittent, and continued fevers, may be regarded as not essentially connected with the volumes which are to follow. We fear lest the limits of our review should prevent us doing that justice to this volume which the many judicious remarks, and interesting matter to be found in every page, demand; we shall therefore give only a concise analysis of the theoretic part, and extract chiefly from the practical, whereby the learned reader will be enabled to judge of its general utility.

In the preface, which occupies forty-four pages, the author addresses the student as entering on the study of medicine; and, pointing out the deficiencies in the writings of our countrymen, proceeds to make some general remarks on the symptoms, diagnosis, prognosis, and the various causes of diseases, in which he introduces the method he proposes to adopt in the following sheets.

The introduction, to which sixty pages are allotted, contains some pertinent critiques on the nosological arrangement of Cullen, from which much information may be collected. The following is the mode of arrangement adopted by the author.

“ ARRANGEMENT OF FEBRILE DISEASES.

“ CLASSIS I. *Febres idiopathicae*. Prægressis languore, lassitudine, et aliis debilitatis signis, pulsus frequens, calor auctus, sine morbo locali primario.

“ ORDO I. *Febres intermittentes et remittentes*. Febres idiopathicae, paroxysmis pluribus, apyrexia, saltem remissione evidente, interposita, cum exacerbatione notabili, et plerumque cum horrore redeuntibus, constantes.

“ ORDO II. *Febres continuæ*. Febres idiopathicae, sine intermissione, sed cum remissionibus et exacerbationibus, parum licet notabilibus, perstantes. *Species*—1. *Synocha*. Calor plurimum auctus, pulsus frequens, validus, et durus, urina rubra, sensorii functiones parum turbatae. 2. *Typhus*. Morbus contagiosus, calor parum auctus, pulsus parvus debilis, plerumque frequens, urina parum mutata, sensorii functiones plurimum turbatae, vires multum imminutae.

3. *Synochus*. Morbus contagiosus, febris ex synochâ et typho composita; initio synocha, progressu, et versus finem, typhus. *Varietas*—1. *Synochus simplex*. 2. *Synochus petechialis*. 3. *Synochus miliaris*. 4. *Synochus aphthosus*. 5. *Synochus erysipelatosus*. 6. *Synochus vesicularis*.

“ ORDO III. *Exanthemata*. Morbi contagiosi, cum febre idiopathica incipientes; definito tempore, apparent papulae, sæpe plures, exiguae, per cutem sparsae. *Species*—1. *Variola*. 2. *Varicella*. 3. *Rubeola*. 4. *Scarlatina*. 5. *Pestis*. 6. *Urticaria*.

“ CLASSIS II. *Febres symptomaticae*. Morbi locales primarii, calore aucto, pulsu frequente.

“ ORDO I. *Phlegmasiae*. Febris symptomaticae, pulsu duro; quibus est pro morbo locali, vel inflammatio externa, vel dolor topicus simul læsâ partis internæ functione. *Species*—1. *Phlogosis*. 2. *Ophthalmia*. 3. *Phrenitis*. 4. *Cynanche*. 5. *Pneumonia*. 6. *Carditis*. 7. *Peritonitis*. 8. *Gastritis*. 9. *Enteritis*. 10. *Hepatitis*. 11. *Splenitis*. 12. *Ne-*

12. Nephritis. 13. Cystitis. 14. Hysteritis. 15. Rheumatismus. 16. Odontalgia. 17. Podagra. 18. Arthropuosis.

“ ORDO II. *Hæmorrhagiæ*. Febres symptomaticæ, quibus est pro morbo locali, sanguinis profusio absque vi externa. *Species*—1. Epistaxis. 2. Hæmoptysis. 3. Hæmorrhoids. 4. Menorrhagia. 5. Hæmatemesis. 6. Hæmaturia.

“ ORDO III. *Profluvia*. Febres symptomaticæ, quibus est pro morbo locali, excretio aucta naturaliter non sanguinea. *Species*—1. Catarrhus. 2. Dysenteria.

“ PART I. *Of idiopathic Fevers*.

“ Idiopathic fevers, it has been observed in the introduction, are distinguished by the following symptoms: languor, lassitude, and other signs of debility, followed by a quick pulse and increased heat, without any primary local affection. This class comprehends three orders: Intermitting and Remitting Fevers, Continued Fevers, and the Exanthemata, or Eruptive Fevers.”

BOOK I. *Of intermitting and remitting Fevers*.

Chap. I. Of the species and varieties of intermitting and remitting fevers. These are the quotidian, tertian, and quartan, and their varieties.

Section 1. Of the varieties of the tertian. *Section 2.* Of the varieties of the quartan and quotidian. Dr. Wilson, in these sections, enumerates the different species and varieties of intermitting fevers.

Chap. II. Of the symptoms of intermitting and remitting fevers. This chapter contains seven sections: the first treats of the symptoms of the cold stage of intermittents; the second, of the symptoms of the hot and sweating stages; the third, of the anomalous symptoms of intermittents, in which the reader will see every symptom enumerated with great perspicuity and order, and interspersed with the opinions of most writers of celebrity. The fourth section treats

of the diseases with which intermittents are most frequently complicated; these are diarrhœa, cholera, dysentery, obstructions of the different viscera, dropsy, jaundice, and different species of inflammation. The fifth section comprehends the prognosis of intermittents, which includes the discussion of the doctrine of critical days, noticed by writers from the time of its inventor, the great Hippocrates. The sixth section treats of the symptoms peculiar to the different types: and the seventh of the manner in which the different types assume more or less of the continued form.

The THIRD CHAPTER brings us to page 152. It details the morbid appearances discovered by dissection in those who die of intermitting fevers. Several appearances are described; but intermittents, the author justly remarks, like many other diseases which prove fatal, do not leave any trace to be discovered by dissection. A variety of morbid appearances, it is true, has been observed in those who died while labouring under ague, none of which however can be regarded as essentially connected with the fever, none of them seem at all connected with its causes, nor are there any which can be regarded as its immediate consequence.

The FOURTH CHAPTER contains three sections, which deliver the causes of intermitting fevers; the first treats of the predisposing causes; the second, of the marsh miasma, the history of which and its effects are delivered with the author's accustomed clearness and accuracy; the third is on the proximate cause of intermittents, the consideration of which the author passes by, as it is mentioned in continued fevers, the proximate cause of intermittents being generally supposed to be the same with that of continued fever.

The FIFTH CHAPTER, on the treatment of intermitting fever, begins at page 183. The author divides the treatment into two parts, that during the paroxysm, and that during the remission or apyrexia. The former is to be regarded as palliative

palliative only; it is by the treatment during the apyrexia or remission that a cure is to be obtained.

“ Section 1. *Of the treatment of an intermittent during the paroxysm.*

“ Our view in the treatment of the paroxysm of an intermittent is constantly to put a period to the stage which is present, by inducing that which naturally succeeds it, till a free flow of sweat takes place. The crisis we aim at is then obtained, and we discontinue the use of our medicines.

“ There are two indications then in the paroxysm of an intermittent; the first, to endeavour during the cold stage to induce the hot; the second, while the patient labours under the hot stage to promote a flow of moisture by the skin. The following observation, however, is always to be kept in sight; that although it is our view during the cold fit to induce the hot, we are not indiscriminately to employ every means which tend to this effect. Many are otherwise so hurtful, that their bad effects more than compensate for any advantage to be procured by shortening the cold fit. The same observation applies to the means employed in the hot stage: all the means we employ at this period tend to promote sweat, but every thing which has this tendency is not proper in the hot fit of an intermittent. I am now to point out what the proper means of fulfilling each of the foregoing indications are.

“ 1. *Of the means to be employed during a cold fit.*

“ These are very simple. I shall not indeed enter fully into the treatment of the paroxysm of an intermittent in all its forms. The observations I shall make on the practice in continued fever are very nearly applicable to the paroxysm of agues; so that I shall at present confine myself to what more particularly belongs to the treatment of these fevers.

“ I have occasion to refer so frequently to what is to be said of continued fever, that it may be thought perhaps I should have made this complaint the first order of idio-
pathic

pathic fevers. My reason for not doing so is, that the symptoms and causes, as well as the treatment of intermittents, are more simple than those of continued fever; and I think no confusion will arise from the references alluded to. In order to understand perfectly the treatment of either intermitting or continued fever, indeed, we must be acquainted with that of both.

“ The patient’s feelings generally point out to us the greater part of the treatment necessary in the cold fit. He should be put to bed and kept warm, and some have recommended the warm bath. We are informed by Dr. John Hunter, that the negroes and others in Jamaica derive considerable advantage in the cold stage of agues, from stretching themselves out in the sunshine.

“ During the cold fit the patient is generally allowed the use of warm diluting liquors, but not stimulating, for these are apt by their irritation to heighten the symptoms of the hot fit that succeeds; all kinds of aromatics, therefore, distilled liquors, and wines, should be used with caution at this period, and altogether forbidden when there is any tendency to an inflammatory diathesis, that is, to the symptoms enumerated in the definition of synocha. Many do not allow drink of any kind in the cold fit, except to promote vomiting, as much fluid in the stomach and bowels generally increases the oppression.

“ It is common in all kinds of fever to acidulate the patient’s drink. For this purpose cream of tartar, or the vegetable of vitriolic acid, is employed; and they are particularly useful in intermittents when the stomach and bowels are loaded with bile, the noxious properties of which they tend to correct. These, however, and the other medicines, which have been termed refrigerant, are improper in the cold stage.

“ The most effectual means of bringing on the hot fit, is the operation of an emetic. This, if the complaint be
severe,

severe, should be exhibited as soon as the cold stage is formed, if it has not been given before the commencement of the paroxysm, which we shall find is often entirely prevented by this means. The antimonium tartarizatum is the best emetic in this case, and should be given in pretty large doses. Nauseating doses of emetics are more properly indicated in the hot stage; the act of vomiting is of more service in the cold. When spontaneous vomiting from bile or other irritating matter in the stomach supervenes, then diluents only are necessary.

“ Purgings in the cold stage is improper, and blood-letting altogether inadmissible. Blisters are proper in the cold fit, if coma or delirium attend. When these symptoms are considerable, the head should be shaved, and a large blister applied over it.

“ Such are the few directions to be attended to in treating the cold fit of an intermittent. The practice in the hot stage is rather more complicated.

“ *Of the means to be employed during the hot fit.*

“ The indication of cure in the hot stage of intermittents, I have already had occasion to observe, is to promote a flow of sweat. This is done,

“ 1. By removing every cause of irritation.

“ 2. By dilution.

“ 3. By the use of sudorifics.

“ 4. By supporting the strength when much debility attends. And,

“ 5. By moderating excitement when the symptoms of synocha prevail.

“ 1. Every cause of irritation tends to protract the hot fit. The most common cause of irritation in intermitting fever is bile in the stomach and intestines. When this occurs, these passages are in the first place to be cleared, which will have been done to a certain degree if the emetic has been exhibited in the cold fit; which it ought to be when

the stomach is oppressed, unless spontaneous vomiting supervenes. Cathartics, it has just been observed, are improper in the cold fit, nor are they well suited to the hot stage of intermittents. The bowels should be cleared during the apyrexia, but not immediately before the fit is expected, for a reason which will afterwards appear. When the hot fit is of long duration, however, and the bowels much oppressed, a gentle cathartic becomes necessary.

“ Of cathartics, calomel has lately been much recommended in fevers of all kinds, especially by the practitioners of warm climates. Dr. Lysons and others particularly recommend it in intermittents. It will presently appear that small doses of antimonium tartarisatum, or ipecacuanha, are often for another purpose exhibited with advantage in the hot stage of intermittents. These, not being sufficient to excite vomiting, pass the pylorus, and generally render any other cathartics during the paroxysm unnecessary. If the action of these medicines indeed is determined to the skin, by means presently to be pointed out, they generally induce sweat, and not catharsis. When this happens, however, there is perhaps no case in which we should attempt to move the bowels; nothing tending more effectually to check perspiration, and in these circumstances to protract the paroxysm.

“ The exhibition of emetics in this complaint sometimes renders that of other medicines troublesome. But as emetics are not so well suited to the second as the first stage of intermittents, the only difficulty arises from the operation of the emetic given in the cold fit still continuing. When this happens in cases where it is necessary to move the bowels in the hot stage, we must have recourse to clysters. These indeed are preferable to cathartics when the strength of the patient is much reduced, and the cause of irritation is chiefly confined to the large intestines, as in costiveness.

“ Other causes of irritation will be pointed out when we speak

speak of continued fever; and as far as these operate in the paroxysm of an ague, the observations which will then be made are applicable to the case before us, with this exception, that external heat is less to be dreaded in intermitting than in continued fever. We shall presently find that gentle warmth is among the means of shortening the hot as well as the cold stage of agues; in the former, however, it is to be employed with more caution.

“ 2. During the hot fit the patient should not be refused the use of diluent liquors. Many indeed do not permit him to drink till the sweating stage commences. There is nothing more distressing, however, and few causes of irritation more apt to increase fever, than thirst: and unless the quantity be very large, mild liquors in the hot fit will not be found to increase the oppression, and they tend to promote sweat.

“ In the cold stage, and while the hot is forming, whatever drink the patient uses should be tepid; when the hot stage is perfectly formed, cold drink is both more grateful, and generally more beneficial. When a moisture appears on the skin, the drink should again be tepid.

“ In the treatment of all fevers we should have in view that the evacuant and diluent plan is debilitating, and must therefore be used with caution, unless the excitement is considerable. It is also to be remembered, in attempting to discharge the bile from the stomach and intestines, that purging, and still more vomiting, tend to emulge the biliary ducts, and seem often to excite the liver to a more copious secretion of bile. We might therefore endanger the patient's life, were we to persevere in attempting entirely to free his stomach and intestines of a matter which, in consequence of the very means we employ, is poured into these cavities in greater quantity.

“ In the hot as in the cold fit, when a vomiting and purging of bile occur spontaneously, diluents only are ne-

cessary,

cessary, and if these motions prove obstinate, they must be allayed (when there is reason to suppose that the greater part of the bile is discharged) by opium; which we shall presently see is otherwise useful at this period. Acids, in this case as in others, while bile is prevalent, should be mixed with the drink.

“ 3. The next means of promoting perspiration in the hot stage of intermittents, is the exhibition of sudorifics. I have already had occasion to observe that vomiting is not so well suited to the second as the first stage. Nauseating doses, particularly of antimonial emetics, are more serviceable in the hot fit, especially when combined with opium, and when their operation is determined to the skin by gentle warmth.

“ As our view here is to promote perspiration, James’s powder, which is supposed by many to be better calculated to promote the action of the skin than the other preparations of antimony, is generally preferred to tartar emetic. Either of these medicines conjoined with opium is among the most powerful we possess in the hot fit of intermittents. Dover’s powder, in which opium is combined with a small quantity of ipecacuanha, is used with the same view, but seems inferior to the former. Opium alone has been found one of the most successful means of shortening the hot fit. This effect it seems chiefly to produce by promoting the perspiration.

“ 4. Wherever there is much debility, especially where those symptoms appear denoting a great degree of debility in the natural functions, the paroxysm is protracted, and the patient in danger of falling into typhus. I have already observed that these symptoms are seldom present to a considerable degree till the complaint more or less assumes the form of this fever. This part of the treatment, therefore, will be considered at length when we speak of continued fever; and as what will then be said is in every respect applicable

plicable to the present case, it would occasion needless repetition to enter on it here.

“ I am now, therefore, to consider the last set of means for shortening the hot stage of intermittents.

“ 5. Wherever the inflammatory diathesis is considerable, not only the duration of the paroxysm, but that of the fever, will be protracted; and as this diathesis is the most frequent cause of obstinacy in intermittents, the means of relieving it may be regarded as the most important part of the treatment during the paroxysm; and indeed when these are not indicated, little in general need be done at this period, except what the feelings of the patient point out; for although sudorifics certainly shorten the duration of the hot fit, they are not to be regarded, like the means for removing the inflammatory diathesis, as essential to the cure of the complaint.

“ The first observation to be made respecting the treatment during the paroxysm of an ague in which this diathesis (that is, the symptoms of synocha) prevails to a considerable degree, is, that all stimulating medicines are hurtful, and consequently that opium, in other cases so beneficial, is then to be avoided.

“ The means for relieving the inflammatory diathesis are different according to its degree. A variety of saline preparations is recommended with this view, and they are often sufficient, when the inflammatory symptoms are not considerable, to allay them. Whatever other means we employ, indeed, these always make a useful addition to them. The reader will find a great variety of them enumerated by the authors whom I have had occasion to mention. He will find most of those employed by foreign practitioners in the 192d page of the first volume of Burserius's *Institutiones Medicinæ Practicæ*. The following chiefly deserves attention.

“ Saline juleps are prepared by mixing a mild fixed alkali with

with lemon juice, nearly in such proportion as to form a neutral salt, care being taken, however, that there shall be an excess of acid. This medicine should be taken during the effervescence, and repeated every third or fourth hour. It is grateful to the stomach, relieves the feverish heat, and tends gently to move the body. The spiritus Mindereri is a medicine of the same kind, but not perhaps equal to the other, where the inflammatory diathesis is considerable.

“ To the same class of medicines belong the various acids, vegetable as well as mineral. The best of these are lemon juice and the sulphuric acid; and the best way of using them is in the drink, as above recommended.

“ Nitre has long been a celebrated medicine in all cases of fever in which the symptoms of synocha prevail. The effects of this drug upon the animal fluids, when out of the body, seem to have had a principal share in raising the reputation of nitre in these complaints; for many have been inclined to account for the effect of medicines on chemical principles. Hoffman says, it is better than the refrigerants of the acid kind, since it is not apt to coagulate the juices; for solutions of it dissolve recent thick blood; and, in some degree, says Dr. Lewis, preserve it from coagulation as well as corruption. Nitre changes dark blood to a red colour, and produces the same effect on the flesh of dead animals. But it is surely impossible to determine the effects of a medicine upon the living entire body, from any experiments made upon parts of it, either before or after death. If we estimate the virtues of nitre from its effects on the entire living body, we shall find it fall much short of the encomiums bestowed upon it. When given in the common dose of a few grains, it often produces little or no effect. Where its effects are obvious it diminishes excitement, and for this purpose is superior perhaps to most of the other medicines which have been mentioned; given in larger doses it oppresses the stomach, and sometimes, not always, proves

proves cathartic. Nitre should never, perhaps, be given in a solid form : in this state it is most apt to occasion oppression and sickness. When these symptoms occur from its use, they may generally be removed by plentiful dilution, which is itself a powerful mean of moderating excitement, and should always make a part of the treatment when the excitement runs high.

“ But wherever the excitement is considerable we must have recourse to more powerful remedies than any of these, namely, evacuations. I have already made some observations on the use of cathartics in the hot stage of intermittents. In addition to these observations, it may now be remarked, that when the symptoms of synocha prevail, although there be no irritating matter in the stomach or bowels, it is proper to exhibit frequent diluent and gently cathartic clysters. It is to be kept in view, however, that when the excitement runs high we should not attempt to overcome it by cathartics.

“ The effect of evacuations in relieving this state of the system, is proportioned to the rapidity with which they are made. The evacuation procured by cathartics is slow; and although a moderate catharsis will relieve the inflammatory diathesis when it does not run high, in order to relieve it when considerable, a long-continued purging is necessary, by which the patient's strength would be much impaired. In this case, therefore, we must have recourse to some evacuation which can be made with more rapidity, and which, consequently, will relieve the symptoms without being pushed so far; and then purging is only to be employed to procure an evacuation of the fæces or other irritating matter in the alimentary canal, or at most very gentle cathartics are to be recommended to aid the more powerful remedy.

“ Of all the means with which we are acquainted, none so effectually diminishes excitement as blood-letting. This

remedy demands particular attention, since there are few, perhaps none, by which more good or harm may be done.

“ The first remark to be made on blood-letting is, that, strictly speaking, it is not to be ranked among the curative means in the treatment of intermitting fever, but to be regarded as the remedy on which we chiefly depend for counteracting a certain diathesis that tends to protract the complaint. This observation must be kept in view, since it has been asserted by some that the cure of intermittents may be attempted by blood-letting alone; an opinion which has often led to improper modes of practice in these fevers. It is not to be denied indeed that mild vernal intermittents, which are generally more or less of an inflammatory nature, now and then yield to this remedy; but the only inference to be drawn from this is, that such fevers, being very mild, require no remedy after the inflammatory diathesis is removed. So far indeed is blood-letting from being the remedy on which we depend for the cure of agues, the truth seems to be, that except in those cases where actual inflammation, or that diathesis which disposes to it, is present, it is universally hurtful in these complaints. Even Sydenham, who in general recommends venesection with so much freedom, observes; that in young people a quartan, which would have terminated in six months, is by blood-letting protracted to twice that period; and in old people the disease is not only protracted, but life endangered, by the rash use of the lancet.

“ It is impossible to lay down any rule respecting blood-letting, in the different species of intermittents, which will be found generally applicable. It is by authors having attempted to do this that the subject has been involved in so much perplexity. On reviewing, however, the works of those who have had extensive opportunities of treating this complaint, we may perceive what the symptoms are which render blood-letting necessary; at what period of the disease

it

it is proper to employ it ; what the consequences to be dreaded from it are ; and in what circumstances these consequences are most apt to take place. I shall make a few observations on each of these heads. In the first place, then, we are to consider what the symptoms are which render blood-letting proper in intermitting fever.

“ Wherever the countenance is flushed, the head-ache considerable, or the delirium obstinate, with a full and hard pulse, blood-letting is necessary. When, along with this state of the pulse, the fever assumes more of the continued form, or the patient is affected with dyspnœa, we must have recourse to this remedy.

“ It is difficult to point out the degree of excitement which, independent of local affections, or the fever assuming a more continued form, warrants the employment of blood-letting in this complaint. The use of this remedy in intermittents will be better understood after considering its exhibition in continued fever. One observation must be kept in view, that, for two reasons, a less degree of excitement warrants blood-letting in intermitting than in continued fever. In the first place, the removal of increased excitement, that is, of the symptoms of synocha, is of more importance in the cure of the former than in that of the latter disease ; and because in the former we have less reason to dread the debilitating effects of blood-letting. This observation will be sufficiently illustrated when speaking of the use of the bark in intermittents, and of blood-letting in continued fever.

“ In those cases where there is no increase of excitement, and still more where the pulse is small, frequent, and intermitting, we cannot do a more improper thing than make use of a lancet.

“ With regard to the period of the disease at which it is proper to employ blood-letting, it may be observed, that as the continuance of every disease tends to weaken, those

symptoms which indicate this remedy are seldom present after the complaint has lasted for a considerable time. Except, therefore, a new disease requiring blood-letting supervene, it is seldom proper in protracted cases. At the first attack, on the contrary, it often proves beneficial, particularly in the spring, or at other times when the epidemic has an inflammatory tendency.

“ Blood-letting to a greater or less extent is generally necessary at the beginning of intermittents in warm countries, especially when the patient has lately arrived from a colder climate. In warm climates, however, this remedy is always to be employed with much caution.

“ Blood-letting in the hot fit of agues was regarded by the ancients as a dangerous practice: succeeding experience, however, has contradicted this maxim; and it is now generally admitted, that the patient may be bled at all periods of the disease, except during the cold and sweating stages, and at the time the paroxysm is expected, that is, either in the hot fit, or during the intermission.

“ If we reflect upon the end we have in view when we prescribe blood-letting in intermitting fever, we shall find reason for confining this remedy to the hot fit alone. It has already been observed, that blood-letting is not to be regarded as one of the means of a radical cure. It has been a favourite opinion in medicine, and still is with many, that fevers depend upon a noxious matter existing in the fluids, and that this may be evacuated by blood-letting. We can perceive, however, without very minute observation, that the effect of blood-letting in all kinds of simple fever, that is, of fever which is neither in any degree produced by, nor has itself caused, any local affection, is merely that of diminishing excitement, which, if violent, threatens a dangerous degree of subsequent debility, and even when but little above the healthy standard, tends to render intermittents obstinate.

“ From

“ From this view of the subject it appears that we ought not to employ blood-letting during the remission or apyrexia. The excitement is never considerable at this period, and blood-letting will not prevent it becoming so during the ensuing paroxysm, with the same certainty that it will relieve the increased excitement when present. Besides, when the excitement is morbidly increased, the patient bears the loss of blood better than at other times. Dr. Lind regretted that he had bled a patient during the apyrexia; the event was unfortunate, and he owns that an experienced physician thought it probably would not have been so, had the blood-letting been ordered during the paroxysm.

“ In intermitting fever, therefore, the most proper time for letting blood is during the hot fit of the first paroxysms. We are now to consider the consequences to be dreaded from blood-letting.

“ The certain consequence of repeated blood-letting, especially when not employed with judgment, is debility, and this now and then is so sudden, even where the quantity of blood lost is not very considerable, that patients have sometimes expired almost immediately after venesection. This has not often happened; the powers of life, however, are frequently so impaired as to render the fever more obstinate; or even to undermine the constitution, and induce dropsy or other lingering diseases.

“ Another consequence of blood-letting, not to be overlooked in diseases which are of long continuance, is plethora. It is well known that the frequent repetition of blood-letting induces a state of body which renders the discontinuance of the habit dangerous.

“ It only remains to take notice of the circumstances in which the bad effects of blood-letting are most to be dreaded. There are few remedies whose good and bad effects more frequently seem to balance each other than that I am now

speaking of; so that cases occur in which the most experienced and acute physician cannot positively determine whether it ought to be recommended or not.

“ The general rule is, that wherever debility is present, or with certainty expected, blood-letting is dangerous; and yet in both these cases we must sometimes employ it. In idiopathic fevers, however, it is only the latter of the difficulties with which we have to struggle. For wherever debility is actually present in these fevers, blood-letting we shall find is decidedly improper.

“ In sultry climates fevers run their course rapidly, so that a patient who is labouring under a strong full pulse, and the other symptoms of synocha, shall in a short time be reduced to the last stage of weakness, and the symptoms denoting a dangerous degree of debility, in the various functions of the system, shall make their appearance. In such cases the violent excitement at the commencement of the fever, if not relieved, will terminate in this state of debility; yet the only means we have of relieving it are themselves of all remedies the most debilitating.

“ Mr. Clark, after relating the fatal terminations of three cases in which blood-letting was employed to moderate the violence of the excitement at the commencement of the remittent of sultry climates, observes, that he has since found it necessary to lay aside blood-letting in such climates, both at sea and on shore, except when local inflammation was present.

“ What is best to be done in such cases can only be determined by considering a variety of circumstances, for which I must refer to the observations that will be made on the same difficulty, when we speak of continued fever; as these are in every respect applicable in the present case.

“ Blood-letting is to be cautiously employed, whatever be the excitement, at the beginning of the complaint, if the epidemic is of a putrid nature, particularly if the patient is,

is, or has lately been, subjected to the action of other debilitating causes : it must be sparingly used, for instance, in hospitals, where patients are often exposed to a noxious atmosphere, and their bodies generally reduced by a scanty diet. For similar reasons, blood-letting is more to be feared in large and populous cities, than in the country. In summer and autumn it is a more doubtful remedy than in winter and spring ; fevers in the former seasons being frequently attended with much debility, which is the source of all their most alarming symptoms. ‘ *Æstate et autumnò,*’ Burserius observes, ‘ *sanguinis missio in intermittentibus minus convenit.*’

“ In all cases it is to be remembered, that blood-letting is more or less pernicious according to the habits of the patient. Those accustomed to this evacuation bear it better than others. Our judgment ought also to be much influenced by the age and habit of the patient. People of a plethoric habit, and in the vigour of youth, most frequently require blood-letting, and are least apt to suffer from it.

“ It appears, then, from what has been said,

“ 1. That the symptoms indicating blood-letting in agues are those of increased excitement, if considerable, or such as denote a tendency to local inflammations.

“ 2. That the period most proper for the exhibition of this remedy, is the hot fit, especially during the first paroxysms of the disease.

“ 3. That the consequences to be dreaded from this remedy are debility and its attendants. And,

“ 4. That, on this account, it is most to be dreaded where the body is at the same time exposed to other debilitating causes.

“ Upon the whole, blood-letting is a remedy which generally produces some important effect. If it does no good, it proves hurtful, and often dangerous ; and, on the other hand, in many cases where it is indicated, no other means

can save the patient. The proper employment of blood-letting, therefore, forms an important branch of the practice of medicine.

“ A moderate blood-letting for an adult is ten or twelve ounces, but its extent must vary according to a variety of circumstances, afterwards to be pointed out at greater length. I shall presently have occasion to make a few additional observations on the use of blood-letting in intermitting fever, when I speak of the exhibition of the bark. Such are the means to be employed during the hot fit.

“ All that we have to attend to in the sweating stage is, to avoid whatever might tend to check the sweat; in particular, if it lasts for a considerable time, to give the patient frequent changes of warm linen, that he may not be chilled by wet clothes; to lay him in flannel, indeed, is the best plan, if he has no particular dislike to it. If he is much reduced, his strength should be supported by gentle cordials.”

C. B.

(*To be resumed next month.*)

ART. XI. *An Essay on the medical Properties of the Digitalis Purpurea, or Fox-glove.* By JOHN FERRIAR, M.D. Physician to the Manchester Infirmary, Dispensary, Lunatic Hospital, and Asylum. 12mo. pp. 66. CADELL and DAVIES, London. 1799. Price 1s. 6d.

IN this well-written essay Dr. Ferriar informs us that the effect of fox-glove in retarding the velocity of the pulse very early excited his attention, and induced him to employ it in a variety of diseases accompanied with morbid irritation in the vascular system. He exhibited it at first chiefly in cases of active hæmorrhage, and with very general success.

“ I had an early opportunity,” says he, “ of seeing its effects in a profuse bleeding at the nose. The patient was suddenly attacked by it, in very hot weather, after considerable

derable excess in liquor, and had lost a great quantity of blood in the course of three days, before I saw him. He had been bled in the arm, and the *lixivium martis* had been applied to the internal nostrils. His pulse had become sharp, but was not strong, and I thought it would be imprudent to use any farther evacuation. I ordered him a grain of *digitalis*, with half a grain of opium; and as the hæmorrhage became very alarming, both by its quantity, and by the debility which it occasioned, I directed the dose to be repeated in the course of two hours, if the bleeding did not abate. I saw him soon after he had taken the second dose; his pulse was then soft, and considerably reduced in frequency; the hæmorrhage had ceased, and did not return afterwards.

“ I was consulted by a married woman, under thirty years of age, who had been subject for several years to almost constant menorrhagia. She was naturally delicate, and the irritation and debility caused by the discharge brought on a train of hysterical symptoms. I gave her half a grain of *digitalis*, with half a grain of opium, every night at bedtime; and during the day she took a few drops of laudanum with tincture of castor every four hours. Her pulse, which had been irritable and very frequent, became soft, full, and considerably stronger; and in less than a fortnight she was entirely freed from the discharge of blood which had so long distressed her.”

Respecting the dose of *digitalis*, the author observes, that “ the proper dose of a medicine is undoubtedly that quantity which produces the effect required, whatever be its numerical denomination. A full dose of fox-glove is, therefore, merely a relative term. To one patient half a grain may be a full dose; to another six or eight grains may be given, not only without inconvenience, but without producing any sensible effect.

“ These varieties of sensibility and habit can only be

ascertained by beginning with the lowest dose, and increasing it with the most scrupulous care. That I might arrive with more certainty at a knowledge of the ordinary doses, I have, since the publication of my first cases, invariably given the powder of the dried leaves, in substance, as the preparation least liable to difference of strength. I have seldom found reason to complain of its want of power, though it may not have always fulfilled the indications upon which it was prescribed. I have begun the use of the digitalis with impunity in so many cases, in doses of half a grain, that I take no other precaution than that of joining an equal quantity of opium with it at first, to lessen the chance of nausea.

“ I have frequently ordered digitalis in doses of half a grain, to be given every four, five, or six hours, according to the urgency of the case, in active hæmorrhages, even when I was a stranger to the habits of the patient. I have always succeeded in reducing the pulse, and generally in curing the disease; and I have never seen any material inconvenience produced by this practice—a slight nausea being no unfavourable circumstance to the patient. At the same time that I vouch for the safety of this method, it must be observed that great attention is necessary on the part of the physician and the attendants. The patient's pulse must be examined from hour to hour, and on its first tendency to flag, or on the slightest indication of sickness, the exhibition of the medicine must be suspended. The practice in such cases is extremely critical:—if the fox-glove be properly given, we stop the progress of an alarming, perhaps a mortal disease, in a very few hours; but the remedy, if incautiously exhibited, may become as certainly destructive as the disorder.

“ It is well known to every experienced practitioner, that bleeding with the lancet is very inadequate to the purpose of lessening the velocity of circulation for any considerable
I time,

time, unless it be carried to a dangerous excess. The fox-glove furnishes us with the means of regulating the pulse to our wish, and of supporting a given state of velocity as long as we judge it proper. Though bleeding may still be necessary in the first instance, therefore, yet I apprehend that we can now dispense with the repetition of it, and may thus relieve the mind of the practitioner from a very nice and perplexing question."

In one case of increased action, namely diabetes, we are debarred from using digitalis; Dr. F. observes, he has lately "succeeded in curing at least three confirmed cases of diabetes mellitus, in which the patients were greatly exhausted, by giving the yellow bark, in combination with uva ursi and opium: a scruple of bark, with fifteen grains, or a scruple of uva ursi, and half a grain of opium, were usually taken four times a-day; and lime-water was ordered as common drink. This course is attended with the inconvenience of producing costiveness, but it is much more effectual than any other that he has tried."

Dr. F. next tried the effects of digitalis in the first stages of scrofulous consumption. It succeeded in reducing the frequency of the pulse, and in greatly mitigating the severity of the symptoms; but it did not cure the disease. As this subject has lately so much engaged the notice of the public, we shall insert the following valuable observations at full length.

"The result of my experience may be told in a few words: it is, that the patient's ultimate recovery is not to be confidently expected, even when the pulse is reduced in velocity, and the symptoms are evidently mitigated for a time by the action of the medicine. Many disappointments have taught me not to be elated by one or two instances of success; and I should deceive the public if I presented to them only examples of fortunate practice. I believe that digitalis, properly administered at the beginning of phthisical

sical affections, may suspend the morbid action of the lungs, by which tubercles are formed; that by its continued exhibition, after hæmoptysis, it may be possible to procure the cicatrization of the ruptured vessels, and thus to prevent the formation of ulcers; and I am even disposed to hope that its power of soothing irritation may extend so far as sometimes to heal ulcerations of the lungs, in the advanced stage of consumption. A remedy from which these expectations may be indulged is of unspeakable value, and merits the strictest attention of the physician. But at present I dare not suppose that many cases of confirmed consumption will be cured by it; for the extensive mass of disease generally apparent in inspecting the lungs of phthisical subjects, and the strange formation of new morbid parts discoverable in it, would require for its amelioration an effort of the Power which originally created the living body.

“Though I have mentioned the digitalis as the active remedy employed in those cases to which I have referred, it must be added, that I have found it powerfully assisted in some instances by the exhibition of myrrh and the ferrum vitriolatum at the same time. I have even remarked occasionally that the cough and dyspnœa were relieved, and the frequency of the pulse was diminished, by the use of this mixture alone, when opium and digitalis had produced but little effect. The dose of the salt of iron was generally five grains, repeated four times a-day.

“In this dose I have never found it to accelerate the pulse; nor to disagree with the stomach. A patient of mine was affected with consumptive symptoms, after a copious discharge of blood from the lungs and stomach, occasioned by intemperance and accidental violence. I tried the usual methods of relief, and among others opium with digitalis, but with very little effect. I then directed a mixture, containing myrrh and the ferrum vitriolatum, in the dose mentioned above. He experienced great relief after taking a few doses,

doses, his pulse rose in strength and became regular, his night sweats, which had been profuse, were suspended, and his nights were passed more quietly. But these favourable appearances were only temporary. In another case of general scrofula, where the lungs were attacked, and consumptive appearances constituted for a time the most formidable part of the disease, the cough, dyspnoea, and night sweats, were entirely removed by this method of treatment.

“ The advantage derived from this practice induced me to give steel in substance, in considerable doses, sometimes alone, sometimes in conjunction with Peruvian bark, and other tonics; and I went through a complete course of observations on this plan, in cases where I had an opportunity of attending narrowly to phthisical patients. I found that nothing more could be obtained than a temporary alleviation of the symptoms; and the subsequent aggravation of the disease was so severe, that I was almost inclined to doubt the propriety of the practice. I believe, however, that the combination of this plan with the use of digitalis affords the best means of resisting the scrofulous consumption, provided the ferrum vitriolatum be given in sufficient doses; while the digitalis with opium, mucilaginous medicines, and diuretics, may be opposed to the florid consumption.”

We could with pleasure add other observations which are made on the use of this remedy in spasmodic asthma, coughs of long standing, palpitations of the heart, dropsy, &c. but we have already exceeded our limits, and must refer our readers for what remains to the pamphlet itself. R.

ART. XII. *Taschenbuch für Angehende Aerzte, &c.* i. e. *Compendium of Materia Medica, for young Physicians and Surgeons.* 2 vols. 8vo. 1797. Konisberg.

THIS compendious treatise contains a short view of the different remedies and articles of diet which are generally employed.

employed. It may easily be imagined (from its size,) that it cannot enter much into detail of the particular cases or circumstances under which the remedies are to be exhibited.

The classification which the author adopts has something novel in it, and is founded on the following principles :

Every disease is to be considered in two points of view.

1. As a phenomenon, or result of a certain number of phenomena. 2. As a cause which is followed by its effects. All remedies, therefore, may be divided into two classes ; nosological and ætiological.

Nosological remedies are either those of sensation, irritation, or organization.

The causes of disease are so far different from the symptoms, inasmuch as they are secret faults in the constitution or texture of parts. These may either occur in the solids, or fluids ; and, therefore, there are, according to our author, *medicamina ætiologica in solidâ vel in fluida agentia*.

M. K.

. The continuation of our analysis of Dr. Crichton's work on *Mental Derangement*, has been unavoidably postponed till next month.

MEDICAL REPORTS AND CORRESPONDENCE.

Art. 1. *Information respecting the Use of muriatic Acid in the Venereal Disease.* Communicated by Mr. BLAIR, Surgeon of the Lock Hospital and Finsbury Dispensary, &c.

To the Society of Physicians and Surgeons.

GENTLEMEN,

IN the Prospectus to your Review and Magazine, an invitation is held out to medical men to transmit you an account of foreign publications : I therefore take the liberty of sending an extract from a pamphlet, which, there is reason to suspect, has not till now been imported into England. I have also sent you the work itself, that you may have

have an opportunity of comparing this extract with the original, or, if you think proper, of laying an analysis of the whole before the public*.

I remain, Gentlemen,

With great respect, yours, &c.

Great Russel Street, Bloomsbury,

W. BLAIR.

Nov. 16, 1799.

IN the summer of 1798, I received a polite letter from Dr. Struve, of Görlitz in Lusatia, requesting that I would send him a copy of my publication on the nitrous acid, &c. for the purpose of translating it into the German language. He has lately favoured me with another letter, dated August 12, 1799, accompanied with a translation of my pamphlet, to which he has added a new preface and occasional notes. In this preface Dr. Struve says, that the first mention of the use of nitric acid for venereal complaints, in England, was through the medium of Hufeland's *Journal der practischen Arzneikunde*, and afterwards by M. Alyon's essay, in 1798; but that the virtues of *muriatic acid* in the lues venerea had been long known in Germany. He not only details the substance of the trials which were made with muriatic acid at the General Hospital of Vienna, but has obligingly transmitted me a copy of the original publication on this subject: it is entitled, SIMON ZELLER'S *Ersten Geburtsarzten, und Ober-Chirurgen am vereinigten allgemeinen Gebaehr-und Krankenhause in Wien: Praktische Bemerkungen ueber den vorzueglichen Nutzen des allgemein bekannten Baadschwamms, und des kalten Wassers, bey chirurgischen Operationen, Verwundungen und Verblutungen ueberhaupt; nebst einem Anhang von der Salzsaeure in Bezug auf die*

* We are obliged to Mr. Blair for the pamphlet he has lent us, and shall take an early opportunity of analyzing its contents: but for the present we only avail ourselves of the extract he has favoured us with, respecting the efficacy of the muriatic acid in syphilitic complaints.

Lüstseuche; samt einer Fortsetzung tabellarischer Uebersicht der durch volle zehn Jahre in dem hiesigen Gebaehhause vorzueglichsten Geburts und Krankheitsvorfaellen. WIEN, 1797. Octavo, pp. 87.

In this tract, Dr. Zeller has given us an entire section on the use of muriatic acid in venereal complaints (p. 18—24, *Von dem Nutzen der Salzsaeure angewendet in venerischen Krankheiten*;) he says, that as the care of the venereal patients was committed to him, he had for a long time been investigating the effects of mercurial preparations on the human body. Especially, he fixed his attention on the corrosive sublimate, *i. e.* hydrargyrus muriatus; comparing its virtues with other mercurial preparations, and with crude mercury. It is remarkable, he observes, that even the smallest quantity of sublimate, given daily, will produce as severe a ptyalism as twenty times the quantity of any other preparation would effect. Now, if the lues venerea may sometimes be cured by only a dram of sublimate, exhibited in the daily proportion of half a grain; and if the far superior efficacy of this remedy over all other preparations, especially the crude mercury, be also considered; every thinking physician must suspect that there is some inherent active medicine conjoined. It may therefore be naturally asked, how much crude mercury, in comparison with the sublimate, will be required to produce a salivation, or to cure the venereal disease? Suppose there be in each dram of sublimate about 23 parts of mercury, and 37 of muriatic acid; what can be expected from 23 grains of pure mercury, either exhibited at once, or in divided doses? And so we may inquire of the mercurius dulcis, or calomel; which, in respect to sublimate, is made up of the same constituent parts, but perhaps in a converse proportion, *i. e.* as 37 to 23. Experience, says he, proves that three grains of calomel, given every day, will not produce an equal effect with half a grain of sublimate: and as in both the mercury always remains

remains mercury, the active medicinal power must not be sought for in this ingredient, but in the highly concentrated muriatic acid.

This matter was illustrated, continues the author, by actual experiment. Having recollected what his illustrious teacher, SCOPOLI, had said, *Systemate Mineralogiæ, pagina de Muria*, (“*Acidum muriæ, sapienter enim tactatum plurima pandit, quæ inexpertis fabulosa aut impossibilia videntur;*” and indeed the immortal BOERHAAVE does not speak less favourably of it,) he instantly determined to select a patient having the lues venerea, and began by giving him from eight to ten drops of the muriatic acid daily, *spiritus salis acidus*, in two pints of barley-water; augmenting the dose two or three drops every fourth or sixth day, till he took a dram per diem, whereby the cure was happily completed. Dr. Zeller made these experiments ten years ago (his book was published in 1797, it is therefore now *twelve years* since,) and disclosed them to Baron von Quarin, director of the hospital; who approved of his success, and encouraged him to proceed farther in his trials. He has, since then, continued to employ the muriatic acid, which is regarded by him as the sole efficacious agent in the sublimæ, against well-marked, confirmed, and obstinate cases of syphilis, with equal effect, and in some instances with even better; (“*in der reinen, eingewurzelten, und hartnäckigten lustseuche, mit eben so guten, und in inigen fällen, noch mit bessern erfolge;*”) increasing the daily dose, as occasion required, to a dram or more, without producing the salivation which would have been inevitably brought on by mercury. Where the lues had attacked scorbutic subjects, who, on account of the dissolved state of their fluids, could not employ mercury, and even in a scurvy without syphilis, he administered this acid with the best effects.

Particular attention should be paid, he says, to the disorders that accompany the lues venerea, which in most

books are overlooked: for, the syphilis does not attack those only who are free from other ailments; and to the neglect of such complaints the failure of remedies may generally be attributed. Among the patients who have come under his care for the venereal disease, were some afflicted with malignant buboes, which spread every day and hour, notwithstanding the antisyphilitic and antiseptic means employed; insomuch, that in a few days the whole abdomen, as far as the navel, presented a foul sore, aggravated by successive hemorrhages from putrid blood-vessels: the specific and antivenereal remedies were not only useless, but the patients got worse and worse so rapidly, that their cures were despaired of, and the visitors at the hospital gave up all hopes of their surviving. Dr. Zeller immediately ordered them a larger dose of muriatic acid than usual: the putrefaction was arrested in three days, and there appeared to be an incipient cure; the face, which before was pale and wan, acquired a better colour; the eyes became more lucid; and, by using the muriatic acid both internally and externally, the amendment advanced so quickly from day to day, that, in a few weeks, every body who before had seen these half-expiring patients were now astonished to observe their perfect recovery.

Nor was this acid found less beneficial in the carious bones of ricketty children, so difficult of cure: but, on account of its unpleasant taste, it should be mixed with some agreeable syrup; and, at first, it should be added in so small a proportion as not to be afterwards disgusting. Moreover, he employed the acid externally with the best effects, not only in venereal and scorbutic sores, but in all foul ulcers, conjoined with an infusion of scordium or hemlock. In ill-conditioned fistulous openings, also, he has injected it, more or less diluted, so as to have produced laudable suppuration, and a complete cure. With equally good effect Dr. Zeller has applied the muriatic acid to running lymphatic tumours:

tumours: in short, all these extensive advantages have induced him to recommend this remedy to general notice, in hopes of alleviating the sufferings of his fellow-creatures.

Art. 2. *A Pharmaceutical Question.* Addressed to the Society of Physicians and Surgeons, by a Correspondent.

GENTLEMEN,

IF you can supply the information requested in the following question, or obtain it from any of your chemical correspondents, you will oblige a great number of your readers, as well as more particularly,

Shropshire,

Your humble Servant,

Nov. 14, 1799.

Y.....

WHAT is the best method of detecting adulteration in distilled vinegar, so as to have it ascertained what the adulterated material is? There are scarcely any samples of this acid to be met with in the shops of the druggists in this country but what are sophisticated in some way or other. I have now before me a very strong acid, bought of a druggist in Worcester, yet it is undoubtedly adulterated; but with what I am at a loss to determine. It is not so pellucid as this distilled acid ought to be, but it is a much stronger acid than could be procured from vinegar only; its odour is proper. Saturated with *ammonia* it takes nearly double the quantity that genuine vinegar could do; and by saturation its colour changes to the colour *nearly* of vinegar undistilled. Boiled with litharge, as in making the Aq. lith. acet. Ph. L. the colour also changes to that of common vinegar, which it would not do if the acid were genuine.—This vinegar bears the test recommended by Motherby (Med. Dict. fol. 4th ed. p. 17,) therefore it is probably not the vitriolic acid that is added to it. May it not be some other of the mineral acids?

Art. 3. *A Note on the medicinal Effect of living with Cows, in Phthisis Pulmonalis.* Communicated to the Society by THOMAS BEDDOES, M. D.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

AS nobody, to my knowledge, has been moved by my exhortations (in *Considerations on Airs*, in the *West Country Contributions*, and in my *Essay on Consumption*,) to try the effect of living with cows, in phthisis pulmonalis, I have lately myself put this practice to the test of experiment. I have gone to work upon a scale sufficiently extensive to enable me, in no long time, to stand before the public, and to say whether this simple plan of treatment will produce any beneficial effect or not. I do not expect to jump all at once into a cure for the majority of truly consumptive cases; but, by the analysis, variation, and simplification of the method, I certainly do expect to discover something valuable, at least, in the way of relief.

Upon seeing one of my patients, who had been subjected to the process about a month, an apothecary in Bristol has thought it worth while to imitate it; and I hope others will also follow my example, now the opprobrium of innovation is taken away.—Before your next number appears, I shall probably publish the First Part of my Reports.

Clifton,
Nov. 20, 1799.

I am, Gentlemen, &c. &c.

THOMAS BEDDOES.

Art. 4. *On the Efficacy of a Solution of Tartar Emetic, in destroying Excrecences of the Glans Penis.* By Dr. KRAUL, of Germany.

IT is a fact well known among medical men in the present day, that a disease produced by irritation is often cured by an
irritation

irritation of another kind: it is seen every day in the effects of clysters, saline preparations of mercury, copper, &c.; in those of escharotics in general, and probably on many other occasions. As the stibiated tartar has not been much employed with this view, I doubt not but the following fact will be acceptable.

A very robust man, who in his youth had lived freely without diminishing his strength, married at the age of twenty-two. Three months after, there arose on the back part of the glans an excrescence, or wart, which did not at all interrupt his pleasures, so that some time passed before it became troublesome. At the end of two years, however, it had become much larger, and was extremely painful. At this time some others were also perceived, so that he was obliged to refrain from all communication with the fair-sex. The disease gaining ground daily, he at last determined to seek advice.

The posterior part of the corona glandis was now so charged with excrescences, that the prepuce could not be made to pass over it. The largest of these tumours was the size of a hazel-nut, says Dr. Kraul, when I was consulted. I thought it impossible to remove them by means of instruments on account of the great extent of their bases, and prescribed a solution of two drachms of Tart. emetic. and two ounces of spring-water; I desired my patient to wash the tumours frequently with it, by means of a pencil-brush. The desire of being promptly cured, induced him to apply this solution a dozen times in the day. During the first eight days there did not appear any visible alteration, but at length they began to diminish daily. In consequence of this success, I urged the continuance of the lotion with assiduity, and in the space of five weeks the disease was perfectly cured.

Æ.

Art. 5. *On the poisonous Effects of the Bitter Almond.*

By Dr. PIEVRE, of Germany.

THE poisonous quality of the bitter almond upon various brute animals, as dogs, cats, wolves, foxes, squirrels, and many kinds of birds, has been long known, and is particularly mentioned by Wepfer in his *Treatise de Cicuta Aquatica*. Some cases also have been related of its deleterious effects upon the human body, but they are but few, and not well authenticated. The following account, to which Dr. Pievre was an eye-witness, will therefore, it is presumed, be not altogether unacceptable to our readers.

A quarter of a pound of bitter almonds were peeled, after having been put into boiling water. Three children were present at this operation, viz. a little girl, eight years old, one of three years, and a little boy of six years, all of whom, except the first, had previously enjoyed a good state of health. They each of them ate five or six of these almonds. About five minutes after, the youngest complained of not being very well, and soon after was seized with violent efforts to vomit. She brought off her stomach what she had eaten for breakfast. Soon after she lost her memory, and with it her speech, and became motionless. Whilst her parents were engaged in assisting her, the elder sister, who until this moment did not in the least complain, fell suddenly on her back, and was seized with convulsions, so violent, that they took it for an attack of epilepsy, a disease to which she had been subject. She was raised up, and soon after had violent vomitings. She then gradually became better, but a deafness remained for three hours after from the attack of the paroxysm, of which, when she recovered, she had not the least knowledge. The youngest girl in the space of an hour was free from all pain. At length they took some tea, and in a short time perfectly recovered. The young boy, who enjoyed a much better state

of health than his sisters, and who, from their confession, ate least of the almonds, merely suffered a slight indisposition. The mother, who had eaten eight or ten, was not in the least affected.

Experience has proved, in many instances, that boiling and toasting of almonds deprives them of their injurious qualities: and this circumstance is corroborated in the present instance; for the cake which was made with the almonds in question was eaten by all the family, without the smallest inconvenience arising to any individual. Fire, it is well known, produces the same effect upon various vegetable substances. The manihoc (called *Cassava* by the natives, *Jatropha manihot* of Linnæus,) which in the West Indies makes a part of the food of its inhabitants, acts as a violent poison, if eaten before it has undergone a sufficient degree of boiling.

It is a well-known fact, that in Germany bitter almonds are sold as an excellent remedy for agues. An emulsion is made with an ounce of bitter almonds to a pound of water, and between one and two pints of the emulsion is given in the interval of the paroxysm. That it has succeeded in removing the disease in a number of cases cannot be doubted; nevertheless we think it our duty to caution practitioners against the use of so noxious a fruit, especially when we are in possession of remedies that can be employed without the least inconvenience to the patient. A.

Art. 6. *A Case of extraordinary Enlargement of the Heart.*
By Dr. WALLICH, of Coblentz.

A MAN, aged thirty-two years, who had been long indisposed, fell suddenly out of bed at a time when he was in a profuse perspiration, caused by an emotion occasioned by the noise of the cannonading of the fortress of Ehrenbreitstein. He was seized also at that moment with an acute

pain

pain of the left side, below the false ribs, which, instead of being allayed by the means that were used, continued increasing. Various medical gentlemen were consulted, but they afforded him no relief; and he at length entrusted himself to the care of a woman, who gave him very violent and drastic medicines.

The principal symptoms of the disease were, a short, but quick respiration; an immense and continual beating of the heart, which could be perceived at some distance elevating his clothes; an obstinate and spasmodic cough, accompanied sometimes with vomiting: he experienced, occasionally, violent attacks of pain about the false ribs of the left side; and the respiration was often suspended for some seconds; the pulse was continually rapid and full. He could not lie on his back. During two years he was obliged to sleep with his body bent forward, and his back supported by a bed-chair. He was often troubled with indigestion. At length a complete cachexia took place, and he was seized with anasarca all over his body, which soon terminated his existence.

Upon opening the body, a considerable quantity of water was found in the cavities of the thorax and abdomen. But what was more remarkable in the chest, was the extraordinary size of the heart, which was four times as large, and as heavy, as an ordinary sized heart: it reached nearly to the top of the left lung, which was very considerably diminished in size. The heart, at its basis, was *eight inches across*, and five from above downwards: the ventricles were filled with blood. Having examined it more circumspectly, a ligature was put on the large vessels, and the heart removed from the body. It weighed four pounds. Upon laying open its cavities and vessels, a quantity of coagulated blood was found in the right auricle and ventricle, and a polypous concretion in the pulmonary artery. In the left auricle and ventricle there was also a quantity of coagulated blood, and a similar polypous concretion in the aorta, the internal surface

surface of which was very much ossified. The muscular parietes of the ventricles were extremely strong, and considerably thicker than usual.

The liver was of an extraordinary size, and its hardness astonished all who were present. It weighed seven pounds and a half. The coats of the gall-bladder were very much thickened, and appeared of a muscular structure: it contained very little bile. It is somewhat singular that the patient, who had some general knowledge of the structure of the human body, always said that he had an enlargement of the liver, and that he was sure it must weigh eight pounds.

The spleen was likewise enlarged and indurated. Its superior extremity had a considerable indentation, in consequence of the pressure of the apex of the heart on that part. The left kidney was affected in the same way. The stomach and intestines were in a very healthy state. E.

Art. 7. *A Case of Catalepsy, from the Irritation of Worms in the urinary Bladder.* By Dr. KUHN, of Eisenach.

IT is well known that worms are nourished in the different cavities of our body, and most commonly in those which have a communication with the atmosphere, and in which substances are continually received from without,—and thereby conveying into those cavities the germs of such animals. This is the case with the intestinal canal, where worms are so frequently observed. Nevertheless, they are sometimes found in places where it is difficult to conceive how they can be introduced. This is the case with hydatids, which are sometimes detected in certain cavities of our body, and also with ascarides. An example of the latter kind, says Dr. K. lately came under my observation.

An infant of six years of age, of a strong constitution, was attacked suddenly with catalepsy. My son and myself
being

being in the neighbourhood, were called to it, and directed the spine to be rubbed with an antispasmodic liniment, which soon removed the catalepsy; but the child fell immediately into a profound sleep, in which it remained, with a profuse perspiration, for six hours. When it awoke, it cried loudly, as if in great pain, and immediately discharged a large quantity of urine, in which were upwards of two hundred live ascarides. The urine, with the exception of the worms, was in every respect of an healthy nature. I then judged it prudent to administer some calomel, which I ordered to be mixed with jalap, but nothing like worms could be detected in the fæces. From this time the child remained in good health, and all ideas of his having worms were abandoned.

F. F.

Art. 8. *A Case of Trismus, or locked Jaw, produced by the Solium, a Species of Tape-worm.* By Mr. MURSINNA, Professor of Surgery at Berlin.

A WOMAN, thirty years of age, was admitted into La Charité in 1785. She complained of pains in her limbs; was troubled with irregular attacks of fever; had lost her appetite, and was much disturbed in her sleep. It was found, upon questioning her, that she had had the venereal disease, and had undergone a course of mercury; but as there were some doubtful symptoms present, it was judged proper to treat her complaints as syphilitic.

The fever was soon appeased, and the pains of the limbs removed; but there remained a stiffness of the joints of the hands and feet, such as would not give way to any application. In July 1786 she was ordered to go into the medicinal baths, the use of which she continued for a month, when she was suddenly seized with a violent pain in her jaws. The day following there was an evident spasmodic

con-

constriction of those parts, a true locked jaw. The upper and under jaws were so close in contact, that it was with difficulty she could receive any liquid into her mouth. All the other symptoms had entirely left her; she could move her limbs, and walk with ease. She was sent back to La Charité in August, and came under my care. I found the jaws completely locked, the teeth of both jaws being in close contact. I learnt that she had not seen her catamenia since the attack of the trismus. It was with much difficulty that she spoke.

As I was well acquainted with the previous history of her complaints, I employed various preparations of mercury, with and without opium, warm baths, blisters, antimonials, laudanum in very large doses, antispasmodics, emollient applications, and electricity.

All these remedies were inefficacious. I thought that the laudanum rather relaxed the jaws, for during its exhibition she could receive liquids more readily. Several medicines were likewise given to her to promote the menses, but without having the desired effect.

In January 1787 she came to me, transported with joy, and with an intelligible voice, said she could open her mouth. Upon examination I found that she could move her jaws, and with ease introduce any thing into her mouth.

Upon a strict inquiry I learnt that she had had a great discharge from her intestines, and that she noticed there was something uncommon in her evacuations: I therefore examined them, and found a tape-worm ten ells in length. She said that she never had observed any worms come from her before. I ordered her a vermifuge, mixed occasionally with a drastic purge, but she never after voided any worms. The catamenia, which were stopped, now reappeared, and she gathered strength apace. But it was some time before she could open her mouth as completely as before her illness.

It appears to me that this tetanic affection and suppression of the menses can only be attributed to the irritation of the worm. Cases are not wanting which prove that various nervous diseases have been produced by the irritation of worms.

This case of tetanic affection appears also to me to differ essentially from the generality of locked jaws; not only in its duration, but also in the little apparent danger which accompanied it : in answer to which, I am aware that it may be said, that all spasmodic symptoms occasioned by worms and other irritating causes, which do not produce a solution of continuity in the parts which they irritate, rarely threaten the life of the patient. Sauvages makes mention of a case of tetanus caused by worms, which proved fatal ; but in this case the bowels were penetrated by the worms. The most difficult tetanus to cure, is that occasioned by a serious wound, or by an apparently trifling wound ; for twice, to my knowledge, the irritation of the pivot of an artificial tooth, upon the bottom of the alveolar cavity, has caused tetanus, which terminated fatally. A third case of a similar nature, produced by the same cause, I cured by the free use of mercury. The tetanus which is produced by cold, and which is well known in warm countries, yields much sooner to medicines than the tetanus produced by a wound.

G.

Art. 9. *Medical Intelligence from the Ephemerides of Berlin.*

IN the Medical Ephemerides of Berlin, by Dr. Formey, there is a very circumstantial account of the death of the late King Frederic William II. by his body-surgeon, Mr. Rhode, from which we select the following particulars :

Although the king was apparently of a very robust constitution, yet he was early in life affected with syncope.

He

He was often several weeks without any venereal connexion, during which he had no pollutions or emissions. His diet was very faulty, and he was the victim of empirical medicines. He was known to take the *sal naturale* and the *aurum potable* for a great length of time.

The other papers in this number (which is the first of the first volume) are, 1. On the state of the weather in the year 1797, by the editor; 2. An article entitled Medical Policy; 3. A biographical memoir of the court physician Möhsen; 4. Another paper, entitled Juridical Medicine.

J. H.

Art. 10. *Prize Questions of the Batavian Society of Sciences, at Haarlem.*

THE last question being answered in too superficial a way to merit the prize, the Society have thought proper to divide it into the three following, as prize questions for the present year, to be answered by the 1st November 1800.

1. What light has the new chemistry thrown on the physiology of the human body?

2. To what extent has the new chemistry elucidated the physiology of the human body? has it made better known than before, the nature and causes of certain diseases? and what useful consequences, more or less established by experience, can be deduced from thence, for the practice of medicine?

3. To what extent has the new chemistry afforded precise notions on the action of certain internal or external remedies, which have been long in use, or lately recommended? and what advantages can a more exact knowledge in this respect afford in the treatment of certain diseases?

The Society have also postponed the two following questions, which may be answered at an unlimited future period:

1. What are the indigenous plants, least known by their virtues,

virtues, which may be applied with advantage in our pharmacopœias, and may serve as substitutes for exotic remedies?

2. What indigenous plants, hitherto not in use, may be adopted as cheap and good nutriment? and what exotic nutritious plants, employed in other countries, may be cultivated here for the same purposes? A. Z.

Art. 11. *Monthly Catalogue of new Books on Medicine, Surgery, and Natural History.*

AGREEABLY to the request of a country correspondent, we propose in future to give a Monthly List of New Medical and Physical Publications: and in order to render this article as useful and perfect as possible, we shall deem it a favour in medical authors to transmit us *early* notice of the titles, dates, prices, &c. &c. of their respective productions. Gentlemen who take this trouble to oblige us, will, we presume, be sufficiently recompensed by the extensive circulation of such notices, through the medium of our Review and Magazine. After the present month, it is intended only to mention those BRITISH publications which have *very recently* made their appearance; but, as to FOREIGN books, we must be contented to collect occasional hints from the different journals, reviews, magazines, gazettes, and transactions of learned societies upon the Continent, &c. &c.

BRITISH PUBLICATIONS.

Experiments with Metallic Tractors in rheumatic and gouty Affections, Inflammations, and various topical Diseases. Edited by BENJ. DOUG. PERKINS, A. M. &c. &c. 8vo. pp. 355. London, Johnson. 5s.

Hints on Temperance and Exercise; shewing their Advantages in the Cure of Disorders, and by which Medicines are considerably lessened. By J. TWEEDIE, Surgeon, &c. London, Williams. 2s. 6d.

The

The Anatomy of the Gravid Uterus; with practical References to Pregnancy and Labour. By JOHN BURNS, Surgeon in Glasgow. 8vo. pp. 248. Edinburgh, Mundell; London, Longman and Rees. 6s. boards.

Observations on the diseased and contracted urinary Bladder, and frequent painful Micturition; with some Cautions respecting the Use of the caustic Bougie in the Treatment of Strictures in the Urethra: including a Paper on the scirrhus-contracted Rectum, to which the Medical Society of London adjudged a Prize Medal in the Year 1798. By JOHN SHERWIN, M. D. Member of the Corporation of Surgeons. London, Johnson. Price 1s. 6d.

Medical Cases and Remarks. Part I. On the good Effects of Salivation in Jaundice arising from Calculi: Part II. On the free Use of Nitre in Hæmorrhagy. By THOMAS GIBBONS, M. D. 8vo. pp. 108. London, Murray. Price 3s.

FOREIGN PUBLICATIONS.

Tableau du Règne végétal selon la Méthode de Jussieu. Par E. P. VENTENAT, de l'Institut national de France, l'un des Conservateurs de la Bibliothèque du Panthéon. Paris, de l'Imprimerie de J. Drissonier, an 7. (1799.) 4 vol. in 8vo. ornés de planches.

Illustratio iconographica Insectorum quæ in Musæis Parisinis observavit et in Lucem edidit J. Chr. Fabricius, præmissis ejusdem Descriptionibus; accedunt Species plurimæ vel minus aut nondum cognitæ. Autore ANT. J. COQUEBERT, Societ. Philom. et Hist. Nat. Paris. Socio. Tabularum Decas I. Parisiis, Typis Petri Didot, natu majoris.

La Physique réduite en Tableaux raisonnés, ou Programme du Cours de Physique fait à l'Ecole politechnique. Par ETIENNE BARUEL, Examineur des Elèves de la même Ecole, pour la Chimie et la Physique. 38 Tableaux in 4to. broché en carton en forme d'atlas. Paris, chez Baudouin.

Dictionnaire élémentaire de Botanique, par BULLIARD, revu et presque entièrement refondu par LOUIS-CLAUDE RICHARD, Professeur de Botanique à l'Ecole de Médecine. Ouvrage où toutes les Parties des Plantes, leurs diverses Affections, les Termes usités, et ceux qu'on peut introduire dans les Descriptions botaniques, sont définis et interprétés avec plus de Précision qu'ils ne l'ont été jusqu'à ce Jour : suivi d'une Exposition méthodique de ces mêmes Termes, au Moyen de laquelle, et à l'Aide du Dictionnaire, l'Etudiant peut prendre une Leçon suivie sur chaque Partie des Plantes ; précédé d'un Dictionnaire botanique, Latin-Français, orné de 20 planches gravées en taille-douce, avec le plus grand soin. Paris, chez A. J. Dugour. An 7.

Cryptomagie Complète, ou Description des Plantes dont les Etamines sont peu apparentes, suivant les Ordres ou Familles, les Genres, les Espèces, avec les Caractères, et les Differences ; par CHARLES LINNÉ. 1^{re} Edition Française, calquée sur celle de GMELIN, augmentée et enrichie des Notions élémentaires, de Notes diverses, &c. &c. par N. JOLYCLERC, Naturaliste et Homme de Lettres. 1 vol. 8vo. très-grande justification, et beau papier. Paris, chez Levacher.

Cours d'Histoire Naturelle ; contenant une Distribution méthodique, facile, et en grande Partie nouvelle, des trois Règnes de la Nature, en Ordres et Genres, avec leurs Caractères distinctifs ; ainsi que la Détermination caractéristique, historique, économique, médicinale, &c. des Espèces animales et végétales, indigènes au Département de la Dyle (ci-devant Brabant,) et des Espèces étrangères les plus intéressantes, ou les plus connues ; enfin celle de toutes les Productions du Règne Minéral ; avec l'Explication des Termes techniques, et celle du Système Sexuel de LINNÉ. Par le C. VANDERSTEGEN, Professeur d'Histoire Naturelle à l'Ecole Centrale du Département de la Dyle, Membre de la Société d'Histoire Naturelle, et de celle de Médecine, de Chirurgie, et de Pharmacie de Bruxelles, et Correspondant de

de la Société d'Histoire Naturelle de Paris, et de celle des Sciences, Belles-Lettres, et Arts de Bordeaux. Bruxelles, chez Emmanuel Floû. An 7.

Experiences sur la Galvanisme, &c.—Experiments on Galvanism, and likewise on the Irritation of the muscular and nervous Fibres. By F. A. HUMBOLDT. Translated from the German, with Additions, by J. F. A. JADELOT. 8vo. pp. 600. Paris, Fuchs. 6 livres.

Observations sur l'Operation dite Césarienne, &c.—Observations on a successful Instance of the Cæsarean Operation: to which is added, a Description of a new Method of performing it. By Cit. J. A. MILLOT, Accoucheur. 8vo. pp. 38. Paris, Croullebois.

Clinique Chirurgicale, relative aux Plaies, &c.—Clinical Surgery, as relating to Wounds; intended as a Sequel to the Art of applying Bandages. By LOMBARD, Member of the National Institute. 8vo. Strasburg, Levrault. Price 1 rix-dollar, 6 grosch, or about 5s.

Tableau élémentaire de la Séméiotique.—Elements of Semiology; or, the Knowledge of the Signs of Diseases. By BROUSONNET. 8vo. *Ibid.* Price 12 grosch, or 2s.

Elemens de Myologie, &c.—Elements of Myology and Syndesmology. By TH. LAUTH. 2 vols. 8vo. *Ibid.* Price 2 rix-dollars, or 8s.

Elemens de la Médecine, théoretique et pratique, &c.—Elements of the Theory and Practice of Medicine; containing the general Pathology; the epidemic Constitutions of Hippocrates and their Analysis, the Doctrine of Prognostics, and Nosology. By TOURTELLE. 3 vol. 8vo. *Ibid.* Price 4 rix-dollars, or 16s.

Dictionario elemental de Farmacia, o Applicaciones de los Fundamentos de la Chimica moderna a las principales Operationes de la Pharmacia. Por DOM MANUEL HERNANDEZ DE GREGÓRIO. Madrid.

Annalen der Arzneymittellehre.—Annals of the Materia

Medica. By J. J. ROEMER, M. D. Vol. II. Leipzig, Schaefer.

Versuch einer Zeichenlehre, &c.—An Attempt to establish a systematic Diagnosis in the obstetric Art. By C. F. ELIAS, M. D. 8vo. pp. 152. Marburg, New Academical Library.

Medicinische Fragmente, &c.—Medical Fragments, derived from Experience. By J. G. F. HENNING, M. D. 8vo. pp. 400. Zerbst, Fuchsel.

Beyträge zur gerichtlichen Arzneykunde, &c.—Contributions to medical Jurisprudence. By T. G. A. ROOSE, Prof. 8vo. In numbers. Braunschweig, Academical Library.

Chemische Recepterkunst, &c.—The Art of writing chemo-medical Prescriptions; or, a Pocket-book for medical Practitioners, who, in prescribing Medicines, wish to avoid the Errors arising from improper chemical Combinations in Pharmacy. By J. B. TROMMSDORFF, Professor of Chemistry, and Apothecary at Erfurt. Second edition, improved and enlarged. 8vo. pp. 350. Erfurt, Bayer and Maring.

Sammlung auserlesener Abhandlungen, &c.—A Collection of Treatises, selected for the Use of medical Practitioners. 8vo. Vol. XVIII. Leipzig, Dyk.

Kurze Darstellung, &c.—A concise View of the chemical Inquiries into the Nature of the different Gasses. By Dr. A. N. SCHERER. 8vo. Weimar, Gædicke.

Versuch einer Theorie der electrischen Erscheinungen.—An Essay towards a Theory of the Phenomena occurring in Electricity. By L. A. VON ARNIM. 8vo. pp. 146. with a plate. Halle, Gebauer.

Ueber das Ausziehen fremder Körper, &c.—On the Extraction of foreign Bodies from the Œsophagus and the Trachea. By T. G. ECOLDT. 4to. with five plates. Leipzig, Tauchnitz.

Analytische Tabellen, &c.—Analytical Tables, exhibiting the different Species of Minerals; being an Attempt towards

a more

a more correct Method of determining and recognising them, without a Teacher. By A. J. G. B. BATSCH, Prof. at Jena. With a plate. Jena, Gœpferdt. Price 28 *grosch*, or about 3s. 6d.

Handbuch der practischen Heilmittellehre, &c. — A Manual of practical Therapeutics, for the Use of the young Practitioner, as well as the Friends of the veterinary Art. Vol. I. containing the Therapeutics of external Diseases. Leipzig, Seeger. 8vo. Price 12 *grosch*, or about 2s.

Apothekerlexicon.—A Pharmaceutical Dictionary. By SAM. HAHNEMANN. 8vo. 2 vol. Leipzig, Crusius.

G. F. HOFFMANNI Plantæ lichenosæ delineatæ et descriptæ. Vol. VIII. Fasc. 3tius, cum figuris coloratis. Folio. *Ibid.* Price 3 *rix-dollars*, 12 *grosch*, or about 13s. 6d.

Über den Einfluss des Medicinalwesens auf den Staat, &c. — On the Influence of medical Affairs on the State, and on the neglected medical Police in most of the German States. By the Aulic Counsellor SCHÖPF, President of a medical College, &c. 1799. 8vo. Price 6 *grosch*, or 1s.

Art. 12. *Notices of intended Publications.*

WE are informed that “Dr. ROWLEY intends soon to publish a Treatise on the safest and mildest Methods of treating every Species of Venereal Infection, &c.; with cogent reasons why powerful salivations, astringent injections, and caustic bougies, should be banished for ever from practice.”

We have already (in our Review for August) announced a work soon expected from the press, entitled *Memoranda Chemica*, by Mr. PARKINSON, the author of Medical Admonitions: we learn that “a popular medical work by the same gentleman is also in the press, intended to instruct the villager in the means of preserving health, and of removing diseases in their earliest stage; and to apprise him, in a familiar,

miliar, but impressive manner, of the benefits of industry and sobriety, as well as of devoting himself to the performance of parental duties. Some observations are likewise to be introduced on the management of children, and the mischiefs of empiricism. This publication will be entitled *THE VILLAGER'S FRIEND*; and will be sold at such a price as will bring it within the reach of the manufacturer and husbandman."

The medical Superintendants of the PNEUMATIC INSTITUTION at Bristol intend speedily to commence a periodical work, to be entitled, "Researches concerning Nature and Man." They design to publish it quarterly; and their first fasciculus will contain several articles enumerated in our Review of Dr. Beddoes's "*Notice*," p. 236 of the present number.

Mr. CHARLES BROWN, Surgeon, proposes soon to publish "*A Treatise on the Hydrocephalus Internus*."

Mr. NEMNICK, of Hamburgh, has circulated proposals for publishing by subscription, a very curious work, to be entitled, *Nomenclator pathologicus decemlinguis*; being a collection of the names of various diseases, in ten languages.

Dr. BEDDOES will very shortly publish a Report on the medicinal effect of living with Cows, in Phthisis pulmonalis.

Dr. HOOPER is printing a new and enlarged edition of his *Anatomist's Vade Mécum*.

Mr. BLAIR's Second Collection of Cases on the antivenereal Effects of nitrous Acid, &c. will be published in a few days.

The Third Part of Dr. THORNTON's splendid "*Illustration of the Sexual System of Linnæus*" will be published in December.

ERRATA.

In last number, p. 199, bottom line, for *euphoria* read *euphorbia*.

In the present number, the price of Article IX should be 12s. and that of Article X 9s.

THE
LONDON MEDICAL REVIEW
AND
MAGAZINE.

VOL. II. N° X.—DECEMBER MDCCXCIX.

ACCOUNT OF NEW PUBLICATIONS.

ART. I. HUFELAND *über die Natur, &c. der Scropheln*:
i. e. On the Nature, Treatment, and Diagnosis of Scrophula. By CHRIST. MILHELM HUFELAND, M.D. &c.

THIS work, which obtained the prize of the Imperial Academy of Jena, is divided into three principal parts. The first treats of the nature and cause of scrophula, and of the necessary precautions to be taken to guard against it. The second delivers the diagnosis of this disease; and the third part is on the most essential remedies, and the best method of administering them.

CHAP. I. *The nature and causes of scrophula; precautions to be taken to prevent it.*

Before the author enters upon his subject, he gives a general idea of the lymphatic system and its functions. Scrophula is, in his opinion, an affection of the lymphatic system. This section treats of several classes of organs.

1. The absorbing vessels, which are dispersed throughout every part of the body without exception, and which terminate in the thoracic duct, or in blood-vessels by the left subclavian vein.

2. The thoracic duct.

3. An infinite number of glands, formed of blood-vessels, lymphatics, and nerves, and which very much vary the course of the lymph.

These vessels and glands do not act by virtue of a simple mechanical force, they possess a considerable degree of the vital power; and consequently, sensibility and irritability, which renders them subject to such derangements as those powers are susceptible of.

The lymphatic system has two functions in the animal economy, absorption and assimilation. Absorption is carried on in the intestinal canal, on the surface of the body, and in the lungs; it also goes on in the internal cavities of our body, removing the vapour separated by the exhaling arteries, the accumulation of which forms a fluid, that soon would prove troublesome if it were not removed by those particular organs. The absorbents also act in the cavities of the cellular membrane. This last absorption is very essential, and very multiplied. It is this absorption which removes the lymph when too abundant for the nutrition of the parts, and conveys it into the circulating blood; it is by its means that morbid particles, as pus, &c. are removed, to be conveyed outwards; and it is by its means also that most metastases take place.

Assimilation is the second function of the lymphatic system; it is that which prepares the different fluids, and which animalizes them by degrees. It is to this end that our body is every where furnished with so great a number of glands. This system also has an astonishing influence upon our whole economy, being charged with sanguification, nutrition, and the purification of the body in a state of health.

Its

Its derangements can occasion, and do occasion, all alterations of the fluids, the healthy state of which particularly regards that of the organs which prepare them.

After this preamble, the author proceeds to the consideration of the causes of scrophula. He considers them under the different heads, of remote causes, occasional causes, and the proximate cause.

Remote causes of scrophula.

These may be distinguished into three classes. The first includes every thing that can relax, to a certain degree, the tone of the moving fibres, especially of the lymphatic system. The second comprehends whatever can alter the sensibility and irritability of the lymphatic system. The third includes every thing that can contribute to the formation of bad chylè, or the deterioration of the lymph.

A great degree of atony of the lymphatic system constitutes the predisposing and fundamental cause of scrophula. Daily observation teaches us that infants, and especially those of the female sex, are more disposed than other individuals to this disease. Scrophulous parents, and those who are aged, or who are weakened before marriage by debauches, and more particularly by onanism, generally beget children, who, in the end, become scrophulous, or who have from their birth manifest symptoms of the disease: such, for example, as the ophthalmia of new-born children, eruptions which make their appearance soon after birth, an enlargement of the glands, *spina bifida*, and a hardness of the cellular membrane. A bad and undigested nourishment in the commencement of life may produce the same effects.

Hufeland here distinguishes in general as bad nourishment, every sort of food given to children who are not fed with their mothers' milk. According to him, it is almost a general thing that children so brought up have a natural disposition, in a greater or less degree, to scrophula. The

milk which the child sucks from its mother is very different from that which has been some time obtained from a living animal, and especially from that which has been boiled. The former partakes of vitality, a circumstance which cannot be doubted, when it is observed with what facility it is changed in its nature by the passions of the individual by whom it is formed. Another circumstance, which must not pass unnoticed, is, that the animals who furnish the milk which is often given instead of the milk of the mother, as cows in particular, feed only upon vegetables; consequently their milk has a greater tendency to become sour than that of women, whose nourishment is more varied. The manner of introducing this aliment into the stomach, has a great influence on its digestion and nutritive quality; for the milk which the child receives at the breast, mixes better with the saliva than that which is given him with a spoon. Moreover, the latter may be either too hot or too cold, occasioned frequently by the ill state of the health of the cow, &c.

Farinaceous aliments not fermented, vegetables, potatoes, spirituous liquors, aliments too much varied, and given in too great a quantity, form a very bad nourishment.

Every thing that can weaken the intestinal canal and the digestive power, may engender scrophula; so that it is not very uncommon to see the abuse of vomits and purgatives produce this effect. But nothing will produce it in children more decidedly, than acid matter in the primæ viæ; which explains the preservative effects of absorbing remedies in this disease.

Worms and mucus, constant symptoms of weakness of the intestines in children, are likewise very generally symptoms of scrophula.

Too sedentary a life, and the want of exercise, especially in the open air, by weakening the body, singularly favour the disposition to this disease. It is likewise necessary to
rank

rank among these causes, an ill condition of the body and clothing, damp air, and confined air impregnated with animal exhalations, too warm an atmosphere, the use of feather-beds, and a contrary regimen carried to an extreme.

It is not the vices of our physical education only which produce these effects; they may likewise arise from the too violent and premature exercise of the powers of the mind. Forced intellectual faculties are oftentimes a symptom of a scrophulous habit. Unfortunately, the parents, who see with pleasure these early appearances of talent, fancy that they cannot do better than to endeavour to develope them; but they are, on the contrary, a great misfortune, by fatiguing and weakening the body, by occupations which divert children from those exercises and recreations calculated to strengthen their organs.

In short, with children of an age more advanced, onanism, the gloomy affections of the soul, and the fear which too severe an education inspires, often give birth to or strengthen the same disposition. This scrophula depends so much upon atony of the system, that persons afflicted with it have an appearance characterized by every external sign of weakness, and in particular by a certain spongy swelling, if we may be allowed the expression, that may be discerned at first sight. When the disease is recent, strengthening remedies are sometimes sufficient to overcome it.

Occasional causes.

In persons disposed to scrophula, many circumstances may determine its formation. The first which Dr. Hufeland mentions is a certain period of growth in the body.

1. A period is observed at which the lymphatic system receives a particular modification, a certain shock which renders it more irritable, and which increases its activity. This change is called the period of developement; it shews itself by the visible increase of certain glands, which disappear when the developement is perfect.

It is then that the principle of the disease, before dormant, appears to be called into action. At this period, which coincides sometimes with that of the cutting of the third molar teeth, the first symptoms of scrophula are observed; at other times it occurs at the age of puberty. This last period is particularly dangerous to the spine, the direction of which is often deranged, an affection seeming to have an immediate connexion with the scrophulous habit. It is also at this period that we observe a propensity to tuberculous phthisis.

2. The influence of spring is one of the most active causes of the developement of scrophula. The nervous system seems at this period to labour under a particular irritation. It often induces extraordinary symptoms, which are not unfrequently febrile. Then the hidden principles of various diseases are unfolded; this is particularly the case in scrophulous habits, and the symptoms in those who are already afflicted with it assume at this period a more alarming appearance.

3. The first symptoms of scrophula are frequently perceived after violent frights, blows, falls, or wounds, &c. It is not uncommon also to see them make their appearance as the consequence of various diseases, and especially of eruptive complaints; and of the venereal disease, which always affects, more or less, the lymphatic system.

Proximate cause.

The proximate and essential cause of scrophula is to be found in the union of a certain degree of weakness and atony of the lymphatic system, with a particular state of action of those organs, from which a specific acrimony of the lymph is formed.

The common seat of this disease, as of every other which may become hereditary, must be in the solid parts; and it is on this account that parents, in a very enfeebled state, oftentimes transmit it to their offspring. These distant causes, as we have already seen, depend in a great measure

on weakness. Those which induce the attack are frequently more or less irritating. It is observed that irritations, purely mechanical and accidental, acting on the lymphatic system, may excite an appearance of scrophula. Is it not reasonable, therefore, to conclude, that most of the symptoms of this disease may be considered as the consequence of a continued irritation, differently modified? Often, when the disease is not become inveterate, the symptoms may be removed by appeasing remedies, without destroying the constitutional disposition.

These are the principal heads of our author's theory of the causes of scrophula, which he says are the result of attentive observation and of facts. The diseases of the lymph and chyle, which, according to him, may dispose the system to scrophula, are a viscous, glairous, and earthy consistency of those fluids, or too watery a state of the same fluids, as well as of the animal gluten which connects the solids together.

This diseased state of the lymphatic system causes a particular deterioration of the lymph, which is termed scrophulous acrimony. The different fluids of our body are the proper stimuli to the organs in which they circulate; and when their stimulating quality is altered, either through excess or deficiency, so as to change the functions of those organs, the diseased fluid is termed an acrimony.

Formation and effects of the scrophulous virus.

How are these acrimonies formed? It is by bad assimilation, by a derangement in the secretions and excretions, by an increased action or weakness of the vessels, or by a spasmodic constriction, which gives rise to these obstructions: it is thus that the glands become swollen, and they often are cured by the use of some antispasmodic and appeasing remedies; but which, nevertheless, may give rise to much mischief if the spasm remain too long. For when the fluid contained in the vessels becomes inspissated, the

obstruction augments, the quality of the fluids is diseased by being stagnant, and at length it becomes corrupted and decomposed; the acrimony of scrophula is then developed, whilst, at the same time, the process of secretion alters it in the glands. Absorption now ceases, or goes on but imperfectly, in consequence of the obstruction in the absorbing vessels. Congestions are then formed in the cellular membrane, and the more solid parts; from which result œdema, obstructions, white swellings of the joints, lymphatic tumours of different kinds, and swellings of the bone.

The irritation caused by the scrophulous virus, induces throughout the whole system of vessels a particular state of inflammation, and febrile symptoms; it deprives the lymph of its nutritive property by decomposing it: hence arises atrophy, which considerably influences the growth of the bones.

The author next asserts, that the scrophulous virus forms in the lymph a particular acid, which he regards as a characteristic property of this virus.

In cases where the disease has made considerable progress, the scrophulous acrimony may assume a putrid appearance; this mostly takes place at the end of long-continued suppurations of a bad nature, or where the vital power is extremely overpowered. Lastly, the specific virus of scrophula is volatile, can be transmitted from one body to another, and infect by its contagion. But, in order that this may take place, it is necessary that the diseased person be far advanced in the disease, and that it shall have acquired a great degree of putridity; it is necessary also that he shall have had some particular suppuration; that the lungs, for example, shall have been affected. It is likewise necessary that a constant and direct communication be kept up with the sick, and that he be very frequently touched. This infection produces rarely any other disease; but occasions

sions peculiar symptoms, as scald head, obstructions of the glands, certain cutaneous eruptions, &c.

CHAP. II. *The characters by which the scrophulous disposition may be known.*

The appearances by which this disposition can be detected are,

1. Certain circumstances which have taken place before any symptoms of scrophula appear; *e. g.* children born of parents affected at any period of their lives with the disease may be strongly suspected as nourishing the same disposition. It may also be suspected to exist in those who have lived in a gloomy and damp habitation, who have not been fed with the milk of their mother, but with gross and viscous aliments; who have been badly attended with respect to cleanliness; and likewise in those who were born in places where the scrophulous constitution is, as it were, endemic.

2. The external appearance of the body and countenance; a short and thick neck; thick and large jaws, especially the lower; largeness of the head, particularly of the occiput; smoothness and delicacy of the skin, accompanied with a slight swell of the face, attended with the appearance of weakness; light-coloured hair; and blue eyes, with a large pupil—are generally considered as marks of a scrophulous disposition. A swelling, or thickening of the upper lip, is almost a constant sign. This thickening often extends to the nose, the skin of which becomes red and shining. In short, children thus disposed, frequently appear in a good state of health; but their flesh is flabby and spongy: the belly is always large, but not hard to the touch.

3. Imperfections and irregularities in the developement of the faculties; muscular action, the capacity of running, and even speaking, seem to retrograde in subjects disposed to scrophula: the cutting of the teeth, and growth of the bones, are protracted, whilst the improvement of the intellectual faculties goes on more rapidly than usual. It is a fact,

fact, generally observed, that scrophulous children are remarkable for their wit and acuteness. The sexual parts, likewise, take their increase in individuals rather sooner than ordinary; and these persons are more inclined than others to onanism.

4. Different habitual indispositions, as frequent bleeding of the nose, colds, hoarseness and cough, with a copious secretion of mucus in the bronchia, eruptions which have sometimes the appearance of the itch, a kind of œdema of the arms or feet, but more commonly in the face and scrotum. In young girls a discharge similar to the fluor albus is sometimes a forerunner and symptom of scrophula. A great debility of the intestinal canal, which occasions indigestions, acidities of the primæ viæ, watery and green mucous, and sometimes hardened fæces, colics, flatulencies, &c. and it likewise produces great irregularity in the appetite. Attacks of fever, which come on very irregularly, are also observed in those disposed to scrophula before the second year of their age. The fever neither has any regularity in its access, duration, nor symptoms; but it is more characterized by coldness than increase of heat. These febrile attacks often determine the invasion of the disease, which soon manifests itself by eruptions, glandular swellings, and too frequently by mesenteric atrophy.

CHAP. III. *Treatment of scrophula.*

Few diseases resist with greater obstinacy, and baffle the efforts of medicine, more than this; there are, however, few for which a greater number of remedies are prescribed. All the most active articles of the materia medica, all chymical preparations known to have any influence on the system, have been exhibited, and many have been celebrated as possessing antiscrophulous properties. Few of them, however, have preserved their reputation in the opinion of experienced physicians. But here, as in many other diseases, remedies which have been employed with
success

success on certain individuals, have proved inefficacious to others; so that the practitioner, from frequent disappointments, has, perhaps, too hastily pronounced their inefficacy. Our author does not, however, appear to be one of this description: he acknowledges the difficulty there is in treating this complaint, but admits of the greater or less utility of many medicines in its cure.

He grounds his practice in scrophulous cases,

1. On the means which re-establish the tone of the moving fibres of the whole animal system; and in particular that of the lymphatic vessels and glands.

2. Upon those things which allay the irritation of those organs, and remove the spasm which prevents the free exercise of their functions.

There are two ways of fulfilling the last indication; the first is by the use of proper remedies which diminish the nervous erethism, such as warm baths, antispasmodics, and narcotics; the second, by employing medicines which induce an action on the affected organs, an irritation of a different kind from that which constitutes the disease, and which subdues it. It is thus that a putrid ulcer of a bad appearance changes its nature when irritated by some stimulating application which hastens its cure. The medicines which are best calculated to answer this intention are mercurials, antimonials, alkaline salts, guaiacum, &c.

Attention should be paid to the most apparent effects of the disease, as the obstruction and swelling of the glands. The attention of the practitioner should then be directed to the destruction of the virus, by clearing the primæ viæ of acidities, mucus, and saburra, which tend to keep up the disease; and the remote causes should never be forgotten, but their influence always guarded against.

Dr. Hufeland next divides the treatment of scrophula into the dietetical and medical means,

Dietetical means.

The use of these is indispensable. A much more speedy cure would be effected by a proper and regular regimen without medicines, than by medicines without attending to regimen. General rules only can be laid down, susceptible of different modifications, according to the existing circumstances of the case.

The food must be light, of easy digestion, the least disposed to form acidities in the primæ viæ, somewhat substantial and strengthening, but such as will not heat the body.

The patient should, as much as possible, be placed in a pure and dry air, in lofty apartments, in preference to a low and damp situation; in the country, rather than in a town; he should be frequently in the open air, and remain in it as long as convenient.

Another article of regimen, of the highest importance, is a frequent and habitual exercise of the body. It is necessary to surmount the difficulty which scrophulous children have to a too sedentary life, as well as to occupations which do not require any movement. This inclination is, doubtless, a symptom of the disease; therefore circumstances are to be proposed to them which will induce them spontaneously to take exercise: innocent recreations, rural occupations, a search after subjects of natural history, &c. will answer this purpose.

Daily frictions with flannel are of the greatest utility to weak children, with whom they answer all the intentions of exercise.

Cleanliness is also an essential part of the regimen, which should be effected by frequent ablutions of the body with cold water. Lukewarm baths may also be occasionally employed with advantage, as they not only cleanse the skin, but remove the spasm of the lymphatic vessels and glands. Attention should also be paid to the cleanliness of
the

the garments, especially of those which come in contact with the skin, and likewise to the frequent changing of the linen. All these means promote perspiration, circulate the fluids, and thus powerfully contribute to the removal of the atony of the vessels, the primary source of a scrophulous disposition.

B.

(To be continued.)

ART. II. *Swedische Annalen der Medicin, &c.* — i. e. *Swedish Annals of Medicine and Natural History*. Edited by CHARLES ASMUND RUDOLPH, Doctor of Medicine and Philosophy, and Member of many learned Societies, &c. Berlin and Stralsund. Vol. I. Part I. Octavo. Sixteen Sheets.

THE editor of these Annals is a native of Germany. Being in possession of the Academic Bibliothek of Altem, which is published in Swedish, and having the good fortune of being in correspondence with many of the learned men of Sweden, he has undertaken to communicate to his countrymen various intelligence from that kingdom, which, from the nature of the language, and other causes, cannot be generally known in his own.

We cannot but highly approve the author's motives and design; and upon comparing our situation with that of Germany, in respect to such literature, sincerely wish we were possessed of similar channels of useful information.

Such papers as are deemed very interesting, Dr. R. has wholly translated, and from others he has made extracts; some he has criticized, and others merely announced. He excludes chemistry, mineralogy, and experimental philosophy, from his plan.

The present Part begins with the year 1797; but yet we find in it several works of 1796 which are not much known.

As it does not enter into our plan to give extracts from extracts, or from criticisms, we must confine ourselves to merely enumerating the principal contents of the present number. These are :

1. Rudolph Murray on the Progress of Anatomy in later Times. 2. Adolph. Ulr. Grill's Oration on his Collection of Natural History at Soderfors, contains, among other articles, an account of a live Simia Apella, and a Cavia Aguti, &c. 3. Gust. Paykull's Oration on the Progress of Zoology among the Swedes before the Time of Linné. In this paper there is a curious anecdote which mentions, that Pope Honorius III. forbade the Swedish monks (anno 1219,) under the penalty of excommunication, to study natural philosophy. 4. Joh. Gust. Arel's Oration on the State of Medicine in Upsal. 5. New Memoires of the Royal Academy of Stockholm for 1797. 6. Extracts from a Work entitled, *Der Arzt und Natur Forscher*, i. e. *The Physician and Natural Historian*. 7, 8, 9, 10. A Review of Sven Hedin's Scientific Treatises for Physicians and those who are not Physicians. 11, 12. Sven A. Hedin's Compendium of the Practice of Physic and Pharmacopœia. 13. Alb. Sul. Segerstedt's Compendium of Anatomy. 14. B. Bjornland's *Materia Medica Selecta*. 15. New Journal of Economy. 16. A Dissertation on the remarkable Power of the electrical Influence in the Year 1797, and the Cause of the Epidemic which raged among Cats in that Year. 17. Adolphi Murray et Nicol A. Bergsten *Usus Modioli in Fractura et Depressione Cranii, Casu singulari illustratus*. 18. Ejusdem et Conr. Quensel *Abscessus Auris internæ Observatio*. 19. Ejusdem et Jacob Lindblom in *Uteri Retroversionem Animadversiones*. 20. Ejusdem et Jac. Lindblom in *Uteri Retroversionem Animadversiones*.

Beside these there are nearly as many more, the enumeration of which would be tedious and unprofitable. H.

ART. III. *A System of Dissections.* By CHARLES BELL.

Part III. Containing the Anatomy and Diseases of the Thorax, with Plates. Folio. JOHNSON, London. 1799.
Price 5s. 6d.

WE have already noticed two Parts of this useful performance: the present number is not inferior in value to the first and second. We shall here extract Mr. Bell's remarks ON THE INVESTIGATION OF DISEASE IN THE PELVIS, AND OF THE MORBID STATE OF THE PARTS.

“ In their diseased state the parts in the pelvis should not be cut out hastily, or before attention be paid to such points as can alone be illustrated by an examination of the parts in situ. After the great operations, the spreading of inflammation to the bowels, the stage to which the inflammation has proceeded, the quantity of matter, and the course of sinuses near the wound, should be observed:—then the parts being carefully washed, and the vessels perhaps injected (if the state of the subject will allow it, and if they be of consequence in the dissection, as after lithotomy,) a freer investigation may be allowed.

“ After puncturing the bladder, or after a tedious case perhaps of retention of urine where the catheter has been used, the instruments should be allowed to remain: then the bladder being opened from above, we can observe their true place, see them projecting into its cavity, judge of their effects, and of the inflammation in consequence, and of their pressure and effects on the neighbouring parts or opposite coats of the bladder. In taking out the parts, the penis should be first separated from the pubes (which, by the by, may be done without leaving any apparent deficiency, by leaving the skin and glans,) the crura cut from the bone, and the whole forced down under the arch of the os pubis: then proceeding to the inside, cut all freely out, by carrying the knife close to the bones of the pelvis; by which all the parts
are

are retained for further investigation in their natural connexions.

“ How much more important does it make a preparation, to see the kidney diseased, stones impacted in its substance, or abscesses excavating it, the dilated tortuous ureters, the contracted and thickened bladder with the stone in its cavity, or the diseased prostate gland, and constricted urethra, all connected and illustrating each other,—than if each of these were detached and in separate glasses? If students would learn to value a museum, not by the numbers of the glasses and magnitude of the collection, but by the elegance, cleanliness, and useful inferences to be drawn from preparations of morbid parts, or the important points in anatomy which are illustrated by the others, teachers would become ashamed of their opportunities thrown away, and merit would attach to those who had made the best use of their situation, however narrowed their sphere.

“ OF THE BLADDER.—Although in the great dilatation of the bladder from retention of urine there is, in general, no apparent change in the coats; yet, in some instances, the inner membrane has been found loaded and black with extravasated blood. Where rupture has taken place, the gangrene is of small extent, and circumscribed. In cases of stone, cancers, and tumours in the bladder, it is generally thickened (probably by continued irritation,) and the inner membrane, if not evidently inflamed, is covered with an adhesive slimy matter. In such as die violent deaths, and in some fevers, the bladder is said to be found in a state of very strong contraction.

“ The most common effect of disease, as of a stone, ulcer, or fungous excrescence in the bladder, is the thickening of the coats, sometimes even to half an inch in thickness. But this, if we examine narrowly, cannot be mistaken for an increase of muscular force, in order to overcome the difficulty of expelling the urine. The bladder in this
state

state becomes thickened, but at the same time inert. It gives great resistance to distention, but its contraction is also limited: the urine is expelled frequently, and in small quantity, but never completely evacuated.

“ The inner surface of the bladder is, in some cases, diseased with fungous, or polypous excrescences; sometimes there are small irregular tubercles on its whole inside; and not uncommonly such tumours acquire a cartilaginous hardness, which, during the life of the patient, is with difficulty distinguished from a stone. Even in some cases, stones have, I believe, been formed in those tumours; though a more frequent, but still a very rare occurrence, is, that the stone, lying encysted betwixt some of the stronger fasciculi of fibres, they contract round the stone while it has fallen into the interstice, and hold it immoveable.

“ The PROSTATE GLAND may be found swelled or obstructed by casual inflammation, or, being enlarged, abscesses frequently pervade it. But these, it is remarked, do not so often attack the substance of the gland, as the cellular membrane surrounding or connecting its lobes. The gland itself does not easily suppurate.

“ In enlargements of this gland the constricting fibres upon the mouth of the bladder have a strange effect in moulding the gland, as it gradually enlarges so as to protrude it backwards into the cavity of the bladder; which sometimes increases so much (as all tumours do, having once got a direction,) that it forms a pendulous valvular excrescence from the neck of the bladder, preventing the discharge of urine.

“ The enlargement of this gland may sometimes not improperly be called a varicose enlargement; because the enlargement is not so much of its substance as of the surrounding parts and circle of veins, which are in situation and diseases somewhat analogous to the hæmorrhoidal vessels. I have seen in the neck of the female bladder as great

an enlargement as in the male: and in many cases, in dissecting diseased parts to give a clear and distinct view, the tumour gradually vanishes, and before we are aware no mark of disease remains. But of this there is no danger in the most frequent kind of disease, the most incurable and distressing malady, the scirrhus enlargement in old men. Too frequently, in the last stage of life, disease, and the debility of old age, falls upon the urinary passages, causing an irritability in the bladder, and swelling of the prostate gland, and terminating life with excruciating agony.

“ Even when no mark of disease is apparent, yet, upon cutting into the gland, small chocolate-coloured stones, like seeds, are found filling up its ducts, or in little sacs. I have seen this gland stuffed with them like the gizzard of a fowl.

“ The VESICULÆ SEMINALES seem to be seldom the seat of disease, though, from their situation behind the prostate gland, they must frequently be involved in the diseased state of the rectum and bladder. Something of their affections has been already mentioned.

“ Following the course of the urethra, we may observe that the GLANDULÆ ROTUNDÆ, or COUPER'S GLANDS, are frequently the seat or origin of extensive runnings of matter into the urethra, and of fistulæ in the perineum. It has been observed, that strictures are more general about the bulbous part. They are white, hard, partial only, or of small extent; and in gonorrhœa, it seems confirmed by those who have had the best opportunity of examining the urethra in disease, that there is no ulceration; the LACUNÆ are found filled with matter, and the inflammation chiefly towards the extremity of the urethra. The LACUNÆ of the urethra bear no relation to the smallness of their glands; for they are sometimes so large as to receive the point of the catheter, and prevent its introduction into the bladder: and this is the more apt to happen, since the mouths are directed

directed forwards, and act like a valve against any thing going contrary to the stream of urine. The effect of these lacunæ, as I should understand it, is admirable: they are ducts to the glands; but they are reservoirs also, retaining their little stores to lubricate the canal during the passage of the urine. The increased discharge from these must frequently baffle the use of injections, as their form defends them in a great measure from the contact of the fluid.

“ To examine the VERUMONTANUM, and that portion of the urethra which is embraced by the prostate gland, it must be slit open upon its upper part. The verumontanum is upon the under side of the urethra; a little eminence marks it, stretching forwards into the canal with an acute ridge. On the most prominent part of this caruncle the vesiculæ seminales open in two distinct orifices; but a probe or bristle is with difficulty introduced, owing to the softness of their membrane, and the collapsing of their mouths. All around this the numerous orifices of the prostate gland open into the urethra. The secretion of the prostate gland is frequently vitiated, and also that peculiar to the vesiculæ seminales; the ducts must be peculiarly affected during the discharge of semen. Whether the verumontanum suffers a kind of erection or relaxation, it will be difficult to say; but it is evident that tumours or stricture must essentially affect that discharge, and occasion just alarm to the patient.

“ OF THE KIDNEY.—The varieties in the form and distribution of the emulgent arteries and veins, and in the ureters and pelvis, and whole of the gland, are so frequent, that they can scarcely be considered as curiosities.

“ It is probable that coagulated blood, or partly concreted mucus, having been forced out from the ducts, may have given rise to the idea of worms being sometimes found in the kidney. There is no doubt, however, that such concreted mucus, or blood, frequently forms the nucleus of calculi in this gland; for the natural mucous secretion, which continually

exudes from the urinary passages, allowing no deposition from the urine to take hold upon them, prevents the formation of calculi. The urine is at all times capable of forming such calculi when a proper basis or nucleus is afforded, though a greater disposition, or lithic diathesis, as it has been called, is a disease more connected with the whole system. Urinary calculi may be thus the symptom of a more universal disease; or local only, and casually produced. The strange accidents by which foreign matters are made to form the centre of calculi, are innumerable and almost unaccountable; pieces of leaden probes, bougies, catheters, balls, needles. This local and accidental form of the disease is certainly the most favourable.

“Suppuration following inflammation of the kidney will form at one time an immense deposit of matter, converting its substance into a sac of pus; at another, only partial abscesses. Such collections have sometimes been evacuated by the ureters, causing in their course, before they got to the bladder, dangerous retention of urine; or it may happen that by communicating with the colon the matter may be evacuated by stool. It may spread amongst the surrounding cellular substance, or it may even point outwardly to the loins. Such diseased action in the kidney has gone so far, that its seat has been only marked by a more condensed indurated cellular substance.

“In chronic disease of this gland, the appearance on dissection is very different. It acquires an enormous size; or it becomes soft; or degenerates into an assemblage of hydatids; or perhaps a steatomatous mass.

“We may be at once sensible why, upon inspiration and expiration, or in going to stool, or in efforts to make urine, the pain of inflammation in the kidney becomes more violent, when we observe its situation upon the muscles of the loins and upon the diaphragm, and how it must be affected by the play of the latter muscle. We may understand

understand likewise, how, in inflammation or enlargement of the kidney, a stiffness and numbness is produced in consequence of the contiguity of the anterior twigs of the lumbar nerves, which, running downwards, play upon the groin and fore part of the thigh. In retention of urine from the obstruction of the URETERS by stones, hydatids, or clots of blood, they are sometimes so much dilated as to resemble a small gut; and they become, at the same time, tortuous, or are irregularly distended; and in their partial dilatations their internal coat is stretched across like a valve. Their coats, too, in all such cases, become thickened. Where there is obstinate resistance, even the pelvis and ducts of the kidney become enlarged like a second bladder.

“OF THE RECTUM.—The rectum being a very glandular part, largely supplied with veins, and exposed to a variety of exciting causes, is very subject to disease; and peculiarly to scirrhus thickening and contractions of its cavity. When such derangement proceeds to cancerous ulceration, it makes an ugly mass of dissection. In the last stage of such a case, it will be found that the bladder is drawn into disease; that the surrounding cellular substance is hard and scirrhus, sometimes resembling tallow, and that purulent abscesses run through it, perhaps forming communications betwixt the gut and bladder; the coats of the bladder also are thick and hardened, sometimes cartilaginous.

“It should have been observed, in speaking of the section of the pelvis, that in the adult the rectum is dilated into a great bag, or receptacle, immediately above its strong sphincter fibres; and we ought to recollect how necessary it may be to examine the state of this part in all operations in the perineum.

“THE FOLLOWING REMARKS ARE APPLICABLE CHIEFLY TO THE FEMALE PELVIS.—In woman, the action of the transversalis perinei, sphincter ani, and levator ani muscles, differ in no respect from those in man. The vagina has its

peculiar sphincter; but more internally it is embraced by the levator ani. Besides these muscles, the vagina is influenced by the inflation of blood, like the penis in the male; for it is of a spongy nature, and interwoven with numerous blood-vessels; and a cavernous vesicular flexus surrounds the urethra, and is spread out upon the sides of the vagina. The state of all these parts is influenced by the same excitement with the cavernous bodies of the penis. The disorder and relaxation of these muscular fasciculi are followed by the same consequences as in man; and from the interlacements of the constricting muscles of the bladder, vagina, and rectum, and the universal connexion of the levator ani, the same sympathies and deranged sensations take place in disease.

“ Women, it is allowed, are more subject to hæmorrhoids than men; more especially such as have borne children. This probably originates from a greater irregularity and less sensibility in the intestinal canal; from the pressure upon the hæmorrhoidal veins in pregnancy; and in some measure, perhaps, from the wideness of the bones, and the greater strength of muscles requisite to guard the perineum, whose occasional derangement will be more extensively felt. As the action of the muscular fibres of the rectum in producing this disease has been already mentioned, little remains but to mark its varieties. Though in children piles may be occasionally produced, yet in that case they quickly retreat, or there is a slight inflammation, in consequence of which they become hard and painful, but are never permanent. But in elderly people, with habitual costiveness, and its attendant frequent tenesmus and gripes, the piles gradually increase, and the veins, having a tendency to become turgid and varicose, these tumours become habitual; consisting of enlarged veins covered with the thin skin of the margin of the anus; sometimes they are situated within the orifice, and hid. In a more advanced stage, or what perhaps may be

be considered as a different species of the disease, these veins open upon the surface of the tumours, and bleeding become periodical in their discharge, connected with plethora of the venous system of the abdominal viscera, and no longer a local disease.

“ It may be useful to recollect of how much consequence continued pressure is in many diseases of the rectum; for we find that in many cases tents introduced have made wonderful cures of what was understood to be scirrhus thickening of the coats, and where, by the narrowing of the passage, the fæces were almost entirely obstructed. In women of suspicious character, we must recollect, that the venereal disease is more apt to be communicated to the anus, and give rise to symptoms which may be mistaken for worse diseases.

“ It was already observed, how the neck of the bladder in the female sometimes becomes diseased, resembling that so frequent in the male. In a case of this kind, the patient being examined by the vagina, it was ignorantly supposed to be a scirrhus of the vagina, from the extreme pain upon examination, and the feeling of a hard irregular surface, which was occasioned by scybalæ in the rectum. This appears so unworthy of notice, that it should not have been mentioned, had not the woman been frequently examined, and at some distance of time, and by gentlemen who should not have been easily deceived. The scirrhus state of the vagina, however, is not a rare occurrence; but is more generally connected with the scirrhus state of the womb, and probably produced by the disease of the latter encroaching upon it.

“ Cancer of these parts forms a terrible disease: sometimes opening communications with the bladder; sometimes with the rectum, with irregular ragged ulceration, and attended with excruciating lancinating pains.

“ The effects of the venereal disease must frequently

present themselves in the dissection of these parts—inflammation producing adhesions, often callous contractions, and narrowing of the vagina from the cicatrix of old ulcers, recent ulceration, and excoriations.

“ The relaxation of the vagina, attended with a degree of laxity in the neighbouring parts, and perhaps wideness of the bones of the pelvis, allows the UTERUS to glide down and hang upon its ligaments, so as to prolong them gradually, till the os tincae being inverted, the vagina appears externally, forming PROLAPSUS UTERI. Sometimes, by the same relaxation of the parts, the uterus falls backwards by the weight of the fundus, and the neck lies obliquely across the pelvis, and perhaps presses upon the neck of the bladder. This, however, is properly a disease of the first months of pregnancy; which, if allowed to go on unreduced, becomes a most alarming cause of retention of urine. The cure of this disease by pessaries is a delicate matter: for, by the continued pressure upon the vagina, a hollow is gradually made; by the continued irritation pus is gradually formed, ulceration takes place, and the consequence is a fistulous sore perforating the vagina, the suppuration spreading amongst the cellular membrane.

“ What one has seen perhaps by singular chance, he is nevertheless apt to consider as the most natural or frequent occurrence. The rude exertion of manual operation, or the violent efforts of the child, are described as the most frequent cause of the rupture of the uterus. But in a case of this kind which I met with, where the child's arm projected into the belly amongst the viscera, the cause was, on dissection, found to be very different; for the pelvis being extremely narrow, little more than an inch in width, the uterus, by the continued pressure betwixt the brim of the pelvis and the child's head, had been destroyed in the course of a tedious labour. I do not recollect that the wise provision (if we may be allowed the expression) of the distribution

bution of the vessels of the uterus is pointed out; but it is evident, that in the most natural labour, the supply of blood to the womb would be interrupted by the descent of the child's head, were there not another source than the hypogastric arteries, viz. the spermatic vessels; betwixt all of which there are extensive communications, the blood from any one of its four sources getting easy access to the whole body of the womb. The appearances on dissection in the above instance will characterize similar cases. Much serum was poured out into the belly; floating lymph and slimy viscid matter, scarcely fluid, surrounded the arm; and it evidently appeared, that if the patient could have survived a few days, the arm would have been enclosed by the inflammation and consequent agglutination of the surrounding viscera. The smell in such gangrened viscera is very peculiar; it is quite unlike that where pus is formed, and scarcely to be borne.

“ The neck of the uterus is most frequently the seat of disease. When it is slit up, irregularities, or the rudiments of sarcomatous tumours, appear; which sometimes enlarging, and becoming pendulous, fill the whole vagina, and appear at the external part. But these polypous tumours are not peculiar to this part, but common to the whole uterus. When these tumours appear externally they may be mistaken for the prolapsus of the womb: for this latter is not always a regular tumour, with the projecting os tincæ distinctly to be recognised; but, on the contrary, it is frequently very irregular and distorted, the orifice of the womb turned aside, the vagina firmly adhering. Even in dissection, sometimes it is impossible to unravel the adhesions; and it is only known to be a prolapsus of the womb from the change in the viscera, and the sinking downwards of the fundus uteri betwixt the rectum and bladder. During life it is known by the stilicidium, or by the periodical discharge from the orifice of the womb. The prolapsus uteri is often preceded and occasioned by a diseased state of the
uterus.

uterus itself; or it is likely that a dormant disease of this viscus may be excited by the escape from pressure, by the exposure of a secreting surface to air, and the attrition to which the parts are liable; and a terrible ulcerated fungous mass is formed, taking away all semblance of the original form of the parts.

“ As of some consequence in the examination of these diseases in the living body, it may be observed, that either when examining in ano, or within the vagina, the tumours or diseased parts may not come within the touch without changing the posture of the patient, putting them in an erect posture, or in that of going to stool, and causing them to make an effort; by these means only the uterus, or tumours, or polypi, can be brought downwards within the reach.

“ Of all the parts of the female pelvis the ovaria are the most frequently diseased; though, in reference to practice, the knowledge of them is unimportant, if we except that of dropsy, so frequently occurring.

“ Their changes can scarcely be considered as disease: they shrink and become diminished in size in old age; they become solid; they become more distinctly vesicular and enlarged, and full of a yellow turbid fluid; they become a congeries of small hydatids:—these diseases advancing, they become scirrhus and enlarged, firm, containing a steatomatous cheesy matter, or distinct sacs of fluid. In consequence of disease following impregnation (an imperfect impregnation is very improbable,) we find fatty and strangely condensed matter; or, in some rare instances, hair matted and condensed, and even teeth growing and fixed as in a socket, and with a completely formed enamel, as if the pulp and membranes of the teeth had been engrafted, and taken a communication of vessels from the ovum, then grown to full maturity. In the dropsy of the ovaria, they sometimes swell to immense size, filling the whole

whole belly. The encysted dropsy of the ovarium, when it has proceeded thus far, can only be distinguished by the history of the case. The swelling is in the beginning distinct, insulated, and moveable, and situated to one side, answering to the seat of the ovarium. It gradually dilates, till it comes in contact with the peritoneum of the abdominal muscles, adheres to it, stretches up to the diaphragm, forms adhesions with its lower surface, and throws back and compresses the intestines without adhering to them.

“ To give a full and comprehensive view of the diseases incident to the female pelvis would lead to a very long discussion. It would comprehend appearances infinitely varied, especially in the impregnated state. The diseases of the uterus, placenta, and chord; of the ovum in all its stages, and particularly the abortion of the first months, with their multiplicity of deranged appearances, are difficult to be understood; and the explanation of them requires a complete knowledge of a very delicate and minute piece of anatomy, together with much practical dexterity. Though I have had several opportunities of examining the pregnant uterus, and have seen several curious instances of disease, yet all that I have had experience of would make but a few insulated facts, of little weight in the importance of the subject.

“ In treating of the morbid anatomy, I have endeavoured to avoid the appearance of attention to minutiae where nothing is understood, or where I could give no information, sensible that such an attempt fills the eye only, and becomes a mere catalogue of diseases. But I have attempted to place this part of my subject upon the wider basis of the mechanical action of the parts, or general consequences, extensively applicable, as depending upon the laws of the economy. Some observations on the peculiar action of the arteries in glands, as depending upon their form, I should have wished to have added; but as every principle in physiology,

siology, if established, affects every part, however different in structure, I shall throw these observations together in that part of this work which treats of the brain." F.

ART. IV. *Medical Cases and Remarks. Part I. On the good Effects of Salivation in Jaundice arising from Calculi. Part II. On the free Use of Nitre in Hæmorrhagy.* By THOMAS GIBBONS, M. D. Octavo, pp. 108. MURRAY, London. 1799. Price 3s.

THE author having declined the practice of medicine on account of ill health, professes to make known these cases from the pure motive of rendering a benefit to mankind. "Calomel," says he, "has in biliary obstructions frequently been given as a deobstruent; but I do not recollect, that intended salivation for the removal of biliary calculi has ever been recommended. I know that in the East Indies it is a common practice, for inflammations of the liver, after bleeding, to salivate as quickly as possible; but this is foreign to my purpose. I shall therefore proceed to a relation of such cases as I have treated successfully."

Fifteen cases are then recited, the twelve first of which were inserted in Dr. Duncan's *Annals of Medicine* for 1797. We select the four following, as well calculated to illustrate the treatment here recommended.

"Case 5.—On the 22d of March 1781, I was sent for to Mrs. French, a widow lady of this town (Hadleigh in Suffolk,) about sixty years of age. She complained of acute pain, at times, in the biliary duct: her skin and urine were very yellow. After an emetic, I ordered her the following medicines:

"R Calom. Aloes socot. āā gr ij, Sap. Venet. gr viij, Syr. simp. q. s. F. bolus mane et vespere sumendus cum dosi misturæ salinæ.

She

“ She continued the medicines for about three weeks without salivation, or removal of the obstruction. She now became feverish; and I thought it better to omit the calomel, and give her some cooling medicines. She got rid of her fever; and on the 21st of May following, returned to the calomel, &c. but took only one grain for a dose, which she continued for some time, without any abatement of her disorder. I then discontinued the calomel, keeping her bowels open with aloes, rhubarb, and tartar-emetic, to which was joined a little soap, giving her opiates occasionally. From this time to the end of the year 1782, she took opening medicines only, but of which, and all others, she grew tired. She was persuaded to try some nostrum; but her jaundice never left her. On the 8th of October 1783, I was desired to visit her again: she then took the following medicine:

“ *R Calom. gr i, Aloes soc. gr iij, Cons. cynosb. gr v. F. bolus omni nocte vel alterna sumendus, si alvus astricta sit.*

“ She took these, not always regularly, and opiates, till March 18, 1784; during which time I saw her but seldom, Mr. Simpson, who is since dead, her apothecary, having the sole care of her. On the 18th March 1784, I was desired to visit her again. Her complexion and her urine were now of a colour between black and yellow; her stools without bile. I now had a wish to try what the addition of a small quantity of opium, to prevent the calomel going off by the bowels, would do. I therefore ordered as follows:

“ *R Calom. Aloes soc. Philon. Lond. āā gr iv, Syr. simp. q. s. F. bolus omni nocte cum dosi misturæ salinæ sumendus.*

“ She continued in the use of these medicines for near a month before a ptyalism came on. She now, I believe, spit a pint in a day for near a month before any bile got into the duodenum; and even then it passed but in small quantity, and the colour of her skin was not altered. However, as the duct was not wholly obstructed, I prevailed

upon her, supporting her with cordials between her medicines, to persevere, which happily she did for more than two months, spitting every twenty-four hours about a pint and a half. She then was perfectly cured, and has had no return of jaundice since. She is now more than seventy years of age. No gall-stones were found.

“ *Case 12.*—Mrs. Perkins, wife of a gentleman of the law at Manningtree in Essex, sent for me on the 9th of December 1790. Mr. Rogers, her apothecary, said she was, in the beginning of her disorder, troubled with acute pains at the pit of her stomach; that yellowness followed, which, though the pain was sometimes abated, did not wholly go off. He had given her soap, rhubarb, aloes, &c. but the jaundice kept increasing. Her complexion was of a colour between black and yellow. I thought there was no time to be lost; I therefore prescribed for her as follows:

“ *R* Vini ipecac. ℥i, Antim. tart. gr i. M. F. haustus statim cum regimine sumendus.

“ *R* Rad. rhubarb. pulv. Conf. opiat. āā ℥ss, Syr. simp. F. bolus post emet. operationem sumendus. And the following morning to begin with the boluses and mixture as under:

“ *R* Calom. ppt. Pil. ex aloe, Conf. opiat. āā gr iij, Syr. simp. q. s. F. bolus mane et vespere sumendus cum Mist. salin. ℥ij. As she was costive, I ordered the following injection:

“ *R* Decoct. pro enemate ℥x, Olei olivar. Syr. bacc. spin. cerv. āā ℥ij, Pil. ex aloe ℥ij, Sap. moll. ℥ss. M. statim tepide injiciend. The glyster procured very little discharge of fæces; I therefore ordered the following pills:

“ *R* Calom. ppt. Pil. ex aloe, āā gr v, Syr. sacch. q. s. F. massa in pilulas duas dividenda, vespere sumend. et, si alvus astricta sit, mane repetend. These did not open the bowels sufficiently; therefore on the 13th (when I saw her again,) I ordered the pills to be repeated every four hours,
with

with three spoonfulls of the following mixture, till a free passage should be procured :

“ R Infus. sennæ ℥v, Tinct. sennæ ℥v, Tinct. jalapii ℥iij, Syr. rosar. Kali tart. āā ℥ij, Mannæ ℥β. M.

“ December 15. The medicines had procured a considerable discharge of fæces, but not tinged with bile. I therefore ordered for her as under :

“ R Calom. ppt. Ocul. cancr. Cons. ros. āā gr v, Syr. simp. q. s. F. massa in pilulas mediocres divid. statim sum. cum dosi mist. salin.

“ She complained of great weakness and languor ; therefore the following cordial mixture was ordered :

“ R Tinct. lavend. comp. Tinct. cast. āā ℥iij, Aq. distill. ℥v, Syr. sacch. ℥j. M. cap. cochl. ij vel iij larga, in languore.

“ Spitting now came on ; and her urine was not so loaded with bile as it had been ; but a purging supervening checked the spitting ; and she grew more yellow. On the 18th I ordered Calom. gr iij, joined with a few grains of Conf. opiat. to prevent its running off by the bowels, to be taken twice in a day. I was now fearful that the substance of the liver was affected, as a round prominent tumour was to be felt in the region of the liver. But as her fever was not high, I ordered the calomel to be continued ; and this day the spitting returned plentifully ; and for about ten days she spit every twenty-four hours not less than a pint and a half. Her skin and urine became every day of a better colour ; and there was plenty of bile in her stools. The tumour, which was before prominent, now felt flaccid and knotty, not unlike, as Mr. Rogers, her surgeon, and a practitioner in midwifery, observed, a placenta. During the time the ducts were open, she voided an astonishing quantity of black sabulous matter in every stool ; and which, when put upon a hot iron, burned like pitch, emitting a very offensive vapour. She continued spitting, and voiding this biliary sandy.

sandy-like matter, till about the 17th of January 1791, the liver gradually decreasing, and now nearly of its natural size. There is great reason to suppose, from the knotty state of the liver after the bile had got a free passage, and the tumour lessened, that not only the ductus cysticus, and ductus hepaticus, but that the pori biliarii were likewise obstructed; for I do not think it possible for a human gall-bladder to contain a fourth part of the calculi she voided, not much larger than sand. Did the mercury in this case diminish the size of the calculi? The lady had resolution enough to persevere in the use of her medicines and spitting to the end of the month, or some time longer, and happily got rid of her disorder. There was one stone voided, the last that passed, about the size of a pea."

The two subsequent cases were communicated to Dr. Gibbons by Mr. Travis, of East Bergholt, Suffolk:

"Mrs. Abbot, aged fifty, of a scrophulous habit, and subject to biliary complaints, has now, July 30, 1796, a total obstruction of the flow of bile into the intestinal canal, and the colour of her skin is of a dark yellow approaching toward black; she complains of violent pain in the region of the liver, attended with almost continued vomiting. Pulse very quick, and heat excessive. Urine very high coloured, and so diminished in quantity as not to exceed half a wine glass in twenty-four hours; fæces nearly black, and resembling in their texture coagulated blood; tongue foul; thirst urgent; no rest; appetite so greatly impaired that she has not for some time taken more than a single boiled turnip daily.

"Ordered to take an emetic immediately, and, after its operation, an opening draught was given, and the bolus as below at night:

"℞ Calom. gr iv, Opii gr i, cum Conserva cynosb. Fiat bolus hora somni sumendus.

"On the 31st of July she took four ounces of cathartic mixture,

mixture, and on the 1st of August commenced the following pills :

“ R Calom. gr̄ vj, Pulv. rhæi, Sal. polychrest. et Saponis albi, āā ʒj, Olei junip. gr̄t xxxij. Cum syrupo fiant pil. xxxij, e quibus sumat iij bis in die cum haustu stomach. amaro.

“ These, with an occasional cathartic, and the intervention of an emetic, were continued until the 8th of August, on which day the pills below were prescribed :

“ R Calom. gr̄ xij, Pulv. scillæ gr̄ xv, Aloes soccotor. ʒj, Saponis ʒjß, Olei junip. gr̄t xxxx. Cum syrupo fiant pilulæ xxxvj, e quibus sumat iij bis in die cum haustu diuretico amaro.

“ A gentle ptyalism was now produced; relieved her greatly, and was continued until the 14th of August, when the pills being omitted, the spitting went off, and her symptoms returned; on the 24th, therefore, the calomel was again had recourse to.

“ R Calomel. gr̄ iv, Opii purific. gr̄ ij. Cum conserva fiant boli ij, horâ somni sumendi.

“ R Kali pp. ʒj, Infusi gentianæ comp. purg. ʒx, Tincturæ cardamomi comp. ʒj. Fiat haustus 4tis horis cum succo limonis in actû effervescentiæ sumendus.

“ The bolus and draught were continued until the 28th of August, and then altered as follows :

“ R Extracti colocynth. comp. ʒj, Calomel. gr̄ xij. Cum syrupo fiant boli xij, et sumat j bis in die.

“ She persisted in this manner, under a continued moderate salivation, until the 6th of September, when, every morbid symptom having disappeared, the medicines were omitted, and she has since remained free from any biliary complaint.

“ April 9th, 1796. Mrs. Heffill, aged fifty-five, has a total deficiency of bile in her fæces, which are of a clay colour; the pain in the region of the liver is very acute, and occasions most distressing sickness and vomitings. Skin of

a deep and bright yellow. Pulse quick and hard. Thirst great; urine loaded with bile. Was ordered to be blooded, and to take an emetic; and these, with some aperient stomachic medicines, removed the complaint, and she continued well until the 23d of April, on which day the jaundice, with an augmentation of every symptom, returning, and with the additional one of violent pain on one side of her face, the following pills were prescribed:

“ R Salis polychrest. et Pulveris rhæi āā ʒij, Saponis ʒj, Calomel. gr̄ vj, Olei junip. gr̄ xxxvj. Cum syrupo fiant pilulæ xxxvj, e quibus sumat iij bis in die, superbibendo cyathum misturæ cardiacæ.

“ She had taken only eighteen of these pills, and consequently but three grains of calomel, when a hot tile was applied by her friends to relieve the pained side of her face, and which in a few hours occasioned a swelling of the salivary glands of that side; and a ptyalism ensuing from the parts thus affected, was supported for a fortnight, and completely restored her to health.”

The SECOND PART of this publication gives an account of some cases of hæmorrhagy, which were either restrained or stopped by the use of large doses of nitre. The first is an alarming instance of hæmoptoe, wherein the patient, a surgeon, was cured by taking a drachm of nitre every two hours in a cup of barley decoction. Some slight returns of the disease have since taken place, upon exposure to cold; but the patient informs us “that nitre, with a cool regimen, soon set all things right.”

The second case was of a similar nature, and relieved by nearly the same means. Above forty drachms of nitre were taken, in doses of sixty grains each, repeated every four hours. They never once offended the stomach. But, ultimately, this patient died of a pulmonary consumption.—After a little digression, the author details a third case.

“ Mr. Kettle, an innkeeper of Hadleigh, aged fifty and

five years, was attacked in October 1797 with violent vomitings of blood, which was of a very dark colour, and of a grumous quality. After due allowance for the contents of the stomach, which were usually mixed with the blood thus evacuated, he brought up for three days successively not less than two pints and one half, or three pints of blood per day, preceded by a sense of great weight, sickness, and anxiety. His pulse was quick, small, and irregular, his skin hot, thirst considerable; body rather costive, and his stools were loaded with black and fetid blood; urine in small quantity and turbid; little or no rest, great prostration of strength; legs and feet œdematous. Upon examination there appeared a very extensive, hard, and irregular tumour of the liver, and which pressing upon the vena portarum had, probably, given rise to this alarming hæmorrhage. As I had experienced the best effects from large doses of nitre in active hæmorrhagy, I now determined to try what the result would be in passive hæmorrhagy; for, in this case, there were no inflammatory symptoms. I accordingly prescribed for him as follows:

“ R Infusi rosæ rubræ ʒjß, Nitri purificati, Sp. nucis mosch. et Syrupi caryoph. rub. āā ʒj. F. haustus quartis horis sumendus.

“ No sickness or nausea ensued from the use of the nitre. In less than forty-eight hours the bleeding was nearly stopped. In the course of nineteen days he took seven ounces of nitre without the least inconvenience; on the contrary, his appetite was considerably mended. His urine, during the use of the medicine, was secreted in larger quantity, and became limpid, and the induration of the liver was considerably lessened.

“ In about three weeks, however, after he had left off the nitre, the anasarca of the lower extremities had increased, and symptoms of ascites appearing, I ordered small doses of the digitalis purpurea, which relieved him greatly. But a return of his dropsy in the year 1798 proved fatal.”

Next follow "Some Observations on the Use of Nitre in Hæmorrhagy, in a Letter to Dr. Gibbons, by Nathan Drake, M. D." Dr. D. is not of opinion, with Mr. White of Manchester, that this medicine acts on the circulation in consequence of the cold produced during its solution in the stomach; nor does he think, with Dr. Darwin, that it operates by exciting a nausea. Mrs. Kettle, wife of the above-named patient, had an hæmorrhage from the stomach, accompanied with so much nausea and sickness during the use of the nitre, that Dr. Drake was obliged to discontinue its exhibition; "yet during these effects the hæmorrhage, so far from diminishing, increased to a most alarming degree. It was, however, at length put a stop to by bleeding in the arm, and the liberal and long-continued use of the *Tinctura ferri muriati*.

"The power which Dr. Alexander has ascribed to nitre, of *instantly* retarding the velocity of the circulation, and of *surprisingly* diminishing the number of pulsations, I have never experienced. Though to Mr. Kettle and to Mrs. Bradstreet large and repeated doses were given, and attention was paid to the state of the pulse, both immediately after it was taken, and when some hours had elapsed, no sudden change was perceptible, though in both the pulse *gradually* became slower and softer. Mrs. Kettle's pulse, which was quick and hard, underwent no alteration during the nausea and sickness consequent on taking the nitre. It should be observed, however, that where large doses of nitre disagree with the stomach, they are, in general, rapidly ejected by vomiting, the action of which accelerates the pulse; and the material once evacuated, no nausea continues; a circumstance which, if nausea be the effect intended, should lead us to employ a medicine whose powers are more durable, the *digitalis* for instance, in the use of which, though vomiting may supervene, nausea for the most part continues.

"I am inclined to think that in suppressing hæmorrhagy, whether

whether active or passive, *nitre acts merely as a tonic*," [This suggestion, we presume, is totally devoid of proof.] "powerfully though *gradually* diminishing at the same time heat, irritability, and arterial action. That these are the effects of the nitrous acid, when given with a view to remove debility, late experience has amply proved; and may we not attribute the salutary operation of the salt under consideration entirely to this active principle, though in union with fixed vegetable alkali?"

"November 10, 1797. Mrs. Bradstreet, aged 42, has for these last three or four days laboured under violent uterine hæmorrhagy; she complains of considerable pain in her back and loins; the blood flows so profusely as to indicate danger; debility very great; body regular; thirst urgent; tongue white and dry; extremities cold and rather œdematous.

"She has been subject to repeated attacks of this complaint for more than two years, which have necessarily much injured her constitution. Having taken, since the present return, some powerful astringents without abating the discharge, my opinion was requested, and on finding the irritability of the system greatly increased, and her pulse near 120, small but hard, I ordered her the following draught:

"℞ Infusi rosæ rubræ ʒjss, Tincturæ cinnamoni et Syrupi caryophilli rubri āā ʒj, Nitri purificati ʒj. Fiat haustus quartis horis sumendus.

"Twelve were taken in four days; they agreed perfectly well with her stomach; and on the day after their commencement the hæmorrhage began to subside, and by the fifteenth was completely removed.

"To prevent a recurrence, however, the medicines beneath were thought necessary, and, together with a cool, though nutritive diet, were persisted in for some time with every good effect:

“ R Extracti cinchonæ ʒjß, Pulveris rhæi ʒß, Zinci vitriolati gr viij, Cum syrupo fiant pilulæ xxiv, e quibus sumat ij ter in die cum haustu seq.

“ R Cinchonæ pulv. ʒj, Corticis aurantii ʒß, Quassia ligni ʒj, Aquæ ferventis ʒx. Macera per horas iv, et cola.

“ R Infusi colati ʒjß, Sp. etheris vitriol. gr xx. Fiat haustus.”

Dr. Gibbons concludes his pamphlet with a few remarks “on the abuse of flannel waistcoats.” He admits that they may be proper “in rheumatic complaints, lumbagos, and a number of other affections of the muscles and tendons, provided the waistcoats be not worn too long;” but he reprobates “the almost general use of them in pulmonary consumptions.” If the author mean only to condemn the nasty and pernicious practice of “*wearing a flannel jacket for weeks,*” we entirely coincide with him in opinion; but if he wish to discourage the use of flannel in this versatile climate, especially for scrophulous and phthisical subjects, we must beg leave to put in our *caveat* against his instructions, X. X.

ART. V. *Memoirs of the Medical Society of London. Vol. V.*

(Concluded from p. 250.)

21. *Description of a particular Species of Erysipelas.* By THOMAS WALSHMAN, F. M. S.

TWO cases are related by Mr. Walshman, which proved fatal, and appeared, upon dissection, to be connected with a morbid state of the stomach, resembling that described by Mr. Hunter as the effect of the gastric juice. The first case was that of a fine girl, who, three days after her birth, was seized with a pustular affection all over her skin, which suppurated, and one of the pustules on the back part of the

the neck formed into an abscess. The inflammation around the abscess was considerable, continued increasing in spite of all applications and remedies, even after the healing of the abscess, and proved fatal about ten weeks from its commencement. On opening the body, a great portion of the stomach was found in a gangrenous state. No symptoms took place before its death, indicating diseased stomach. In the second case, the child, four years of age, had erysipelatous inflammation about the nates, which spread over the thighs. He was apparently doing well, but died suddenly in a convulsion fit. On opening the body, a similar affection of the stomach was discovered. Some observations accompany these cases, in which the truth of the facts asserted by Mr. Hunter is called in question.

22. *Case of inverted Uterus, with a Retention of the Placenta.*

By Mr. BROWN, Surgeon-accoucheur.

This was a footling case: the child was dead, and in a very sphacelated state. On pulling the funis, it broke. The pains continued, and an unusual bearing down took place, followed by the complete inversion of the uterus. The placenta was adhering in every part, and was immediately returned with the uterus. No hæmorrhage ensued. The placenta did not come away for five days after. The woman had borne thirteen children.

23. *Case of imperforate Rectum and Obstruction in the Neck of the Bladder.* By W. CHAMBERLAINE, Member of the Corporation of Surgeons.

This is an interesting case, and the treatment adopted by Mr. Chamberlaine deserves to be made generally known.

“ I was called,” says the author, “ to attend the labour of Mrs. Ashmore, No. 15, King Street, Compton Street. She had a good natural labour, and was safely delivered of a male child. On my visiting the next day, the nurse informed me the child had had no evacuation either by stool or urine, and that it appeared very uneasy. I found the

pulse feverish, and a great degree of tension and hardness of the abdomen.

“ On examining the anus, I found it in a natural state; however, supposing it possible there might be an obstruction higher up, I introduced a probe into the rectum, and found a firm resistance at the distance of somewhat less than an inch and a half.

“ Withdrawing the probe, I then introduced a very small glyster-pipe well oiled, which stopped at the very same place; then, examining the obstruction, by means of the probe, (the glyster-pipe serving as a canula or director,) I had not the satisfaction to find any thing like reaction, or any sensation as if the *fæces* were forcing down some thin obstructing membrane. However, as the case was desperate, and a most miserable, and perhaps lingering, death was inevitable, unless something should be done, I determined, at all hazards, to attempt a perforation. Having represented the case and its consequences to the parents, and obtained their permission, I determined to perform the operation with a small trocar; and introducing the canula first, well oiled, as high as the obstruction, I pushed the perforator through the obstructing substance until I found no farther resistance; then withdrawing it and the canula together, I had the pleasure to see the instrument followed by a very copious discharge of the *meconium*, slightly tinged with blood. I then thought it advisable to inject a common glyster; the pipe, in passing, stopped at the place where the obstruction had been, but the resistance was soon overcome, and a very moderate degree of force enabled me to get it all the way up. None of the glyster was returned, and the child seemed perfectly easy. On my return, however, in about two hours, I found we had still another difficulty to combat with. He had not made urine, and, in consequence of this, convulsions, shrieking, fever, tension of the abdomen, and other alarming

ing

ing occurrences, had come on. I took a coach and went to Evans's, but could not get a catheter of a size small enough for a new-born infant. I took with me, however, one of the smallest gum elastic catheters I could find; but even this, on trial, was too large, and would not enter the urethra. No time was to be lost; but having no proper instrument, I bent my probe into the form of a catheter, and having, previously to my attempt to introduce the hollow bougie, divided with a lancet the small membrane that closed up the external orifice of the urethra, I passed the probe, without difficulty, as far as the neck of the bladder; having got thus far, its passage seemed opposed by some obstructing substance; nevertheless, by a little perseverance, and gentle management of the probe, I was fortunate enough to find the probe at last move forwards, until I could perceive it to be fairly in the bladder, and the urine making its appearance at the external orifice of the urethra. I then withdrew the probe, which was followed by a plentiful discharge of urine, and the child became for a time easier.

“ Next day, however, a message was sent to me early, that the child was worse; I found all the symptoms of the preceding day much aggravated, with inflammation (which the nurse mistook for mortification) of the abdomen: I ordered the warm bath, fomentations, and emollient glysters, to be prepared, and passed the probe as the day before, with the same success. By the help of these applications, and a few aperient and carminative medicines, the child recovered, and is now perfectly well.”

24. *An Account of the Effects of Ipecacuanha in the Cure of Dysentery, at Norfolk Island.* By W. BALMAIN, acting as chief Surgeon to the Territory of New South Wales.

From this we learn, that two drachms of ipecacuanha, with sixty drops of Tinctura opii, made into pills, were frequently given with great success; but at what intervals

vals we are not informed. From its exhibition, no nausea ensued; the patient commonly had not one stool the succeeding day, although, previous to its administration, the gripings were violent, and the discharge of blood frequent, and in large quantities. A dose of Sal. cathart. Glauk. mostly preceded the use of the ipecacuanha.

25. *A Case of Empyema.* By Mr. WASTELL.

This disease succeeded a violent inflammatory affection of the chest. Six weeks from the first of his illness, a tumour appeared under his left nipple, accompanied with a considerable degree of fever. It continued increasing, and the heart was perceived to beat on the right side. A small tumour soon after appeared on the right side, which emptied itself when the patient was placed in a recumbent posture. An opening was proposed, Mr. Wastell having found that the tumour filled and emptied itself every time the patient coughed; but he was not permitted to operate. About six weeks from the first appearance of a tumour, the patient was seized with an incessant coughing, and in the course of the afternoon spit up three half-pint basins full of thick matter, during which period he was almost suffocated. An incision was now made into the tumour of the right side between the seventh and eighth rib, from which fifty-two ounces of matter, similar to that spit up, escaped. A poultice was applied. At this period the pulsation of the heart was observed near to the right axilla; but, after five days from the operation, it gradually returned to its proper situation. The discharge continued very copious for several days; but it gradually diminished, as did also the expectoration of pus. In a little better than a month after the operation, he walked a mile and a half, and continued mending very rapidly. He then went by sea to his native place, where the wound healed, and he perfectly recovered. In regard to the medical treatment, an opiate only was occasionally given.

26. *Effects of Arteriotomy in Cases of Epilepsy.* By ANTHONY FOTHERGILL, of Bath, M. D.

One decided case only is related, and the disease was recent. The operation was had recourse to on observing a determination of blood to the brain. Another case is related, but a relapse took place.

27. *Observations on human intestinal Worms, being an Attempt at their Arrangement into Classes, Genera, and Species.* By ROBERT HOOPER, M. D.

This is a very interesting and valuable paper. Hitherto the different species of intestinal worms have been imperfectly known; but Dr. Hooper has here presented us with a scientific arrangement, and clear distinctions of the species of those animals, accompanied with five beautifully executed plates. An account is given of the *Trichuris*, a worm recently noticed by the author; but which he very candidly attributes to Roederer, who, he learnt, discovered it first in 1760. We lament that the limits of our review prevent us doing justice to this paper: we shall, however, extract the author's classification, and must refer our readers to the volume itself for any further information.

“ ORDER I.—THE ROUND WORMS.

“ Genus 1. *Intestinal Ascarides*.—*Character*. Body round. Head obtuse, and furnished with three vesicles.—*Species*. *Ascaris Lumbricoides*. The long round Worm, or Lumbricoid *Ascaris*.—*Character*. When full grown, a foot in length. Mouth triangular.—*Ascaris Vermicularis*. The Thread or Maw Worm.—*Character*. When full grown, half an inch in length. Tail terminates in a fine point.

“ Genus 2. *Intestinal Trichurides*.—*Character*. Body round. Tail three times the length of the body. Head without vesicles.—*Species*. *Trichuris Vulgaris*. The *Trichuris*, or long Thread Worm.—*Character*. The head furnished with a proboscis,

“ ORDER

“ORDER II.—THE FLAT WORMS.

“Genus I. *Intestinal Tape Worms*.—*Character*. Body flat and jointed.—*Species*. *Tænia Osculis marginalibus*. The long Tape Worm.—*Character*. The oscula are situated upon the margin of the joints.—*Tænia Osculis superficialibus*. The broad Tape Worm.—*Character*. The oscula are placed upon the flattened surface.”

28. *A short Memoir on the antivenereal Effects of several Acids, and other Remedies, which have been lately proposed as Substitutes for Mercury in the Cure of Syphilis*. By Mr. BLAIR, Surgeon of the Lock Hospital, &c.

This memoir was read to the Society in February 1798. The author had then tried the new remedies to a very considerable extent; and, indeed, his situation as surgeon to the Lock Hospital and Finsbury Dispensary, must have afforded him the best opportunities of ascertaining their real merits. It appears to have accorded with his views to select “well-marked instances of a *confirmed syphilis*, where either venereal blotches, nodes, ozæna, or ulcerated fauces, were present.” The acid of nitre was “given in the quantity of two or three measured drachms daily, seldom more, till from one hundred to one hundred and sixty-five drachms were taken in the whole;” and, Mr. Blair says, he sometimes administered “the oxygenated muriate of potash internally, to the amount of two hundred grains a day.”

“In a word,” he tells us, “I have uniformly ‘endeavoured to bring every thing to the test of truth,’ as Dr. Geach very properly requires; and have bestowed more pains in the administration of the ‘*new specific*,’ so called by an ingenious professor of pneumatic chemistry, than ever I found necessary in the application of the old one: therefore, if my success has been contrary to my wishes, the fault cannot be justly attributed to want of attention and perseverance.”

Notwithstanding all his care, however, Mr. B. intimates that

that he could not effect one decisive cure: “for, although, I have several times witnessed the disappearance of very bad symptoms, and been highly gratified by my apparent success, I have, sooner or later, in almost every instance, seen either the same or a worse train of evils recur; and, in a few cases, this has happened even before the patients had discontinued their medicines. The most clear and palpable evidence, after numerous trials, has therefore compelled me to adopt an unfavourable conclusion.”

We noticed the author's *first essay* upon this subject, in a former number; and we hope very soon to have an opportunity of learning the result of his farther inquiries. At present, the public mind seems undecided as to certain collateral questions.

29. *Case of fatal Termination after the Bite of a mad Dog.*

By Mr. JOHN HAYNES, Surgeon, of Chipping Norton.

The subject of this case was bitten severely in the hand by a mad bitch. Four days after, the bitten parts were cut out, and a caustic applied. Mercury was then exhibited, and a salivation kept up. He went afterwards to work, remained well for nine months, when the bitten parts became painful, he was seized with hydrophobia, and died.

29*. *Case of the Bite of a mad Dog.* By Mr. NORRIS,

Surgeon to the Charter House and General Dispensary.

This patient also died of hydrophobia. The symptoms which took place in the dog, after it became mad, are here accurately described by Mr. Norris.

30. *History of an Empyema terminating fatally.* By J. C.

LETTSON, M. D. &c.

This disease was analogous to that related in article 25. The subject, however, was only seven years of age, and had an hæmoptoe previous to the appearance of the tumour.

31. *Extract of a Letter from Dr. PATTERSON of Londonderry.*

The first part of this extract describes what the author calls “a curious species of rheumatism,” an affection of the diaphragm;

diaphragm; but there does not appear to us to be any thing very curious in the disease, or new in the method of cure. The remaining part is occupied by an account of the weather at Londonderry, in 1793.

32. *Case of an Ophthalmia cured by the Application of Oleum Terebinthinæ.* By Mr. HYNAM, of St. Petersburg.

The author was troubled with a chronic inflammatory affection of his eyes and eyelids for fifteen months, which baffled all assistance. Upon going into a room where turpentine was using, he immediately found himself relieved from the pain: this induced him to apply its vapour, by placing some under his eyes; and afterwards he touched the eyelids with it. Great pain and tumefaction ensued, but three applications effectually removed the complaint.

33. *An Obstruction of the Œsophagus removed by a Tobacco Glyster, on the third Day after the Accident.* By Mr. BLAIR, Surgeon of the Lock Hospital, &c.

A piece of beef stuck in the middle of a man's throat. The probang was used without success by a neighbouring apothecary, and also three days afterwards by Mr. Blair. The patient being then in danger of perishing, he prescribed him an infusion of a drachm of tobacco to be injected *per anum*, as soon as possible, with a view to vomit him. This experiment happily succeeded, and the patient survived, highly to the credit of the author's ingenuity.

34. *A Case of a Child born with variolous Pustules.* By Mr. FLINDERS, Surgeon, in Lincolnshire.

This case adds one more to many of the same nature on record.

35. *On the Fever of Demerary.* By Mr. BEANE, Army Surgeon.

A long account, which contains nothing very important.

36. *History of an Aneurism of the Aorta.* By W. HUNTER, Esq. Surgeon, in the East Indies.

This is a minute and tedious relation of a number of ner-

vous symptoms. The patient died, and upon opening the body, a small aneurism of the aorta just below its arch was discovered, which had ruptured into the left cavity of the thorax; but it did not appear to have had any connexion with the symptoms that were present a long time before his death.

37. *Pathological Remarks upon various Kinds of Alienation of Mind.* By JAMES SIMS, M. D. President of the Society, &c. &c.

One of our judges, the author informs us, having given a most erroneous opinion affecting the life of the supposed culprit, gave rise to these remarks, which are an acquisition to jurisprudential medicine, and ought to be made as generally known as possible amongst professional men. The author's definition of insanity, however, is not less singular than exceptionable. He defines it to be—"the thinking, and therefore speaking and acting differently from the bulk of mankind, where that difference does not arise from superior knowledge, ignorance, or prejudice.

"By solely attending to the former part of this definition, many of the wisest men have been accounted mad, which however shows that to be the basis of the definition in the general opinion.

"I have laid the stress upon thinking differently from mankind, because simply acting differently does not constitute insanity. The highwayman is not insane because he is not convinced that he acts right, whereas insane persons ever act from a thorough conviction of rectitude.

"There are three principal kinds of insanity, totally distinct and different from each other. These are, fatuity, madness, and delirium. Each of these may be again divided into two species: fatuity, into folly and idiocy; madness, into melancholy and mania; delirium, into desipience and raving. This division seems as natural and important in the first and last kinds of insanity, although it has scarcely

scarcely been pointed out, as the middle one, where it has been universally recognised; the difference between the two species in each depending in a great measure upon the energy or activity with which it is accompanied. Thus there are quiet and innocent fools, as well as mischievous and highly noxious ones; and the desipience which accompanies the gaol or hospital fever, appears very different from the violent furious raving in phrenitis.

“ In fatuity the perception of external objects is perfectly right, though perhaps dull; the recollection of them, or the memory, is also right, though apparently very feeble and indistinct; but the faculty of comparing, associating, or combining these, or, in other words, the power of reasoning, is almost entirely wanting.

“ In madness the external senses are right, and it is only the memory or recollection of former objects that seems depraved. By this is not meant a loss or deficiency of memory, as mad persons recollect with great acuteness most of those things which have happened to them; but with these they mix a false imagination of things that have been said or done by or to them, which in reality never happened; and this false memory of things that never had an existence, is at least as strong, and seemingly as precise, as their recollection of such as really happened. It is upon this false remembrance that they act and say all those things that constitute the disorder. The faculty of reasoning is unimpaired; nay, if allowance be made for the false data presented by their memory, the patients often reason with an acuteness, and reply with a wit and brilliancy unknown to them formerly in their best state of health. The sufferers also have a clear determined purpose, which they make use of proper, often the most proper, means to attain. Thus madmen make use of a knife or sword, not a straw or lath, to injure or kill the persons who, in their opinion, have offended them. In short, maniacs often exhibit great
energy

energy both of mind and body; and melancholics, though they do not shew such extreme momentary strength of either, yet they mostly make up by singular perseverance for what they want in sudden exertion.

“ Very different from madness is the alienation of mind usually called delirium. This I would divide also into two kinds, desipientia and raving: the former bears a slight resemblance to melancholia, whilst the latter, having some of the features of mania, is by incautious persons sometimes confounded with it, to the no small detriment of the sufferer. In delirium the external senses, especially those of the sight and hearing, are depraved. Thus during delirium persons are supposed to be seen who are not present, beings that have no existence. Sounds, words, and sentences, are likewise supposed to be heard which have no reality, and conversations are almost constantly supported, either in a muttering or furious way, with these beings fancied present. The memory of persons in delirium is rather blunted than depraved. It is therefore vague and indistinct, seldom, if ever, presenting strongly any thing which either had or had not an existence. The mind also has no perseverance, no energy, no clear, determined purpose; and when they appear to have some purpose in view, they as often make use of means to obtain it, totally inadequate, or even ridiculous. Their reason is totally deficient, and they are much more nearly in a state of fatuity than in that of madness.

“ To sum up all these distinctions in a few words, the deviation from the mens sana is, in fatuity, a want of the power of reasoning; in madness a vitiated state of the memory; and in delirium an error in both, together with a depravation of the external senses.

“ I shall now proceed to such a description of each species as will, I hope, impress their difference more fully on the mind than any discrimination drawn from a few leading symptoms only can possibly do.

“ Fools or idiots are known by a total disregard of decency, a vacant silly countenance, or, if roused to attention, by a stupid stare, a distorted laugh without cause or meaning, a lolling tongue, an inability to speak, or at least to utter words distinctly and articulately, and an incapacity to learn any thing useful, much less scientific. But I need not dwell longer upon this deplorable disease, which, when idiopathic, never admits of cure, or even mitigation.

“ In the first approaches of melancholy the persons become silent and absorbed in thought, dislike being spoken to or roused, and seem always occupied in some grave contemplation. Jests, laughter, and every species of hilarity, seem irksome to them, as do all kinds of business. If questioned concerning being unwell, they deny it. Their nights are restless, or, when they sleep, it is anxious and disturbed, and they wake from it in a fright, and without being refreshed. Their countenance is pale or sallow, and dejected. They avoid society, flying to solitude, where they sit or lie for days, in silent contemplation. Thus far they are unnoticed, their friends seeing little of them, and their menial attendants not perceiving much amiss. Their complexion now becomes dusky, almost livid, or covered with dark spots; the look timid and sorrowful; the eye downcast and steady, with the pupil somewhat dilated, or cast sideways upon objects; pulse slow; heat little; when obliged to move, their motion is slow, measured, solemn, or torpid, with folded arms. Their speech is slow, sedate, solemn, measured, and argumentative; and they are mostly buried in sorrow. A good dinner, with a moderate quantity of wine, seems at first to bring a little cheerfulness with it; but in a short time this gives place to increased dejection of spirits, attended with slow but constant passions; difficult to be excited, but when raised as hard to be allayed. Their muscles appear totally relaxed, attended with great lassitude. They have now a laborious, profound respiration, with reiterated sighs, and they frequently shed tears.

“ The

“ The disorder of the mind now begins to manifest itself more. Their silence gives way, in some degree, and they complain of some action that they have done against some friend or relative, or some crime that they have committed, which can never be forgiven by God or man. This action is often totally imaginary, or where it has a slight foundation, they exaggerate it into a matter of the most unbounded magnitude. In short, their memory, which is the most diseased part, constantly makes them worse than what they are, and sometimes suggests to them their having undergone the most whimsical, ridiculous, or degrading bodily changes.

“ As the disease proceeds they become suspicious of all around them, and imagine they see conspiracies against them in the most trifling occurrences. They think all their friends are become enemies, which induces a *tædium vitæ*, ending often in suicide. Their thoughts are constantly bent towards one object. They enjoy but little sleep, and that anxious, waking often in a fright. They become extremely silent, but have great anxiety painted on their countenance, which at the last becomes austere and morose, with eyes betokening treachery and despair.

“ During the progress of the disorder there are often but few bodily complaints. There is but little perspiration, and all the other evacuations are torpid and diminished. They become emaciated, although their appetite may be far from bad. At other times they refuse nourishment, fasting for days, nay often weeks. The vicissitudes of the weather seem to make little impression on some, others sit close to the fire in summer, or bask in the sun, whilst in winter they appear insensible of cold, and avoid heat studiously. They lose all regard to the common civilities, or even decencies, of life.

“ It has been said that persons liable to melancholy usually possess singular genius; and a line of Pope will be re-

collected wherein he asserts, that great wit is nearly allied to madness; from whence some have gone so far as to suppose that persons of a weak understanding never become mad. In my opinion the supposition is not founded in fact, and arises partly from a few persons of genius having become insane, who therefore are more spoken of than the infinitely greater proportion of weak persons who are so, and partly from confounding hypochondriacism with melancholy; the former being almost exclusively the disorder of ingenious studious literary persons, and which sometimes degenerating into the latter, has made the utmost confusion in the description of both, by authors not distinguishing accurately where the one ends and the other begins, but giving the same symptoms indiscriminately to both.

“ In idiopathic mania the first symptoms that usually occur are, a great degree of restlessness or wish to change place. If the persons be in a room they cannot sit still, but are continually rising and walking about; even when sitting they cannot keep their arms, legs, or almost any part of their body, quiet for a minute; the postures in which they place themselves are also apparently forced and unnatural, and what would make any person in health uneasy. All their motions are quicker than ordinary; they walk quick, stop suddenly, and talk hurried. If walking alone they are constantly talking to themselves; this, however, is not so remarkable a symptom in London as in the country, so many persons who are perfectly sane doing it in the streets; which, I believe, is owing to the constant noise drowning the sound of their voice, which, in rural solitude, would strike their own ears, and so prevent its repetition; add to this, that here almost every man shews a visible eagerness and busied countenance unknown in the country. In walking, their arms are almost continually in motion; their head also partakes of the general restlessness. Their eye is constantly roving about, and scarcely attending
to

to the surrounding objects. They talk in a desultory way, flying from one object to another, in the suddenest manner, and engrossing most of the conversation to themselves, in which they usually mix much unnecessary laughter. In going through the streets they often stop persons with whom they have but a slight acquaintance, asking them a few rapid questions, or talking of trivial matters for a moment, then run on, scarcely waiting to hear what they have to say; yet when they meet an intimate friend, they scarcely notice him, or, if obliged to do so, hurry away from him as quickly as possible. They become loquacious and argumentative, but highly impatient of contradiction. When they talk of trifles they speak with great violence, and often noise, paying little respect to the rank of the person with whom they converse, despising every thing said or done by others, and expecting the utmost deference to be paid to themselves. They are fond of quick motions on horseback, or in a carriage, often taking jaunts on purpose to be driven as quickly as the horses can go. In this way they also indulge their propensity to change of place, of scene, or of company. They have a strong inclination to drink too much wine or spirituous liquors, and are likewise fond of merriment, jests, laughter, singing, and music. During the time that the disorder keeps in this state, little suspicion is entertained of the patients' real situation, the persons most about them ascribing the oddities which they observe, to a too frequent indulgence in wine, keeping their mind, as well as body, heated and irritable; and those who are not intimate with them being incapable of knowing that their present differs at all from their former state of mind. It is not to be imagined that all the symptoms which I have mentioned occur in the very beginning, at least not in so striking a manner. These symptoms also only recur at intervals, as they are produced by some exciting cause, as anger, wine, or exercise, whilst at other times the patients

are as cool and collected as usual. These intervals likewise tend to hide from their friends the real disordered state of their mind.

“ After this state has lasted perhaps for some weeks, the intervals becoming shorter, and the paroxysms stronger, the patients shew some unequivocal sign of derangement. This often happens in money matters. During the former stage they were more generous than usual, even so as to appear profuse; but they now become totally careless of their property, squandering it away most unnecessarily and absurdly, to support a fancied consequence and dignity which they assume. Indeed it rarely happens that maniacs do not fancy themselves to have become kings, princes, or nobles, bestowing titles, honours, and wealth, at their discretion; or at other times prophets, apostles, or even greater, disposing of every thing in this world and the next at their sovereign pleasure. They now think themselves above control, commanding all around them, and striving to awe every one by the fierceness of their eye and steadfastness of their look, yet when overcome by the superior sternness and constancy of another person's look, they submit easily to that person ever after, thinking themselves completely conquered. Ever after being so conquered, and especially if they have suffered any coercion, they become suspicious, insidious, and cowardly; often striving to injure those about them in an underhand, crafty way. I know not how it happens that most writers have described maniacs as courageous, which I am convinced is not the fact. It is true their cowardice is very different from the timidity attendant upon melancholy persons, which last rarely, if ever, prompts them to injure others. They mostly conceive themselves injured by those who have been most friendly to them, thinking that they recollect a number of their actions to them, that in reality never had an existence, and grounding their violent resentments upon ideal faults. Their mind, as the disease in-

creases,

creases, becomes the reverse of what it was formerly. Thus, if moral and pious, they become profligate and obscene; if modest, they appear divested of shame, not covering their nakedness nor seeking to screen their evacuations, but spitting at their attendants, and wallowing in dirt and mire. Their eyes are bloodshot, eyebrows scowling and malicious; at times they appear neither to hear nor see. They are strong, salacious, and have often a priapism. They have no care nor thought of futurity. They delight in noise, railing, scolding, bawling. Their skin is dry, often scaly, and I have always remarked a peculiar smell or fœtor about madmen, by which I think I can distinguish the complaint on first approaching them.

“Most writers have said that melancholy was partial, and mania universal insanity. I believe there is no universal insanity except in some cases of idiocy and delirium. I never saw the maniac who did not understand, nay, reason tolerably well upon some points; that is, when he will deign to take notice of or converse with any one. Fever has been said by many to be an attendant upon mania, but I believe, likewise, improperly. The truth is, maniacal persons may become feverish, nay, delirious; and, indeed, the rage and violent action that they often throw themselves into, must tend to produce fever. Delirium in fever we also know degenerates sometimes into mania. These disorders are therefore, in some measure, convertible into each other. The last remark may be extended to mania and melancholy, each sometimes being changed into the other in the same person. Both species are chronic diseases.

“I have already said there are two species of delirium. In the first, or low species, the patients lie mostly on their back, with a vacant relaxed countenance: their eyes shut, or, if open, fixed upon vacancy, the pupils not being contracted to the degree proper for seeing the object towards

which they are turned : they are continually muttering in an incoherent irrational manner : they attend to nothing around them, and when roused by the by-standers to pay some little attention, after giving, perhaps, one tolerably rational answer, they immediately relapse into their former nearly insensible state : they are continually picking at the bed-clothes, or, if dozing, their fingers are in constant trifling motion : their pulse is quick, but small and unequal, so as to be difficultly counted, and when numbered to give the utmost variety : their tongue often appears nearly as in health, but when put out has a tremulous motion, as have their extremities : their skin is soft and relaxed, seldom betraying much heat : they are insensible of their evacuations : inclinations or appetites they seem almost destitute of, even for drink : they are sometimes fretful with their attendants, but that quickly subsides.

“ The raving delirium is, in some respects, very opposite to this, though in others it coincides with it. In this the patients scarcely ever close their eyes, remaining a week or more, if they live so long, without any sleep : their eyes are dry and mostly bloodshot ; they fix them with great intenseness upon vacancy, where they obviously think they perceive persons or things seen by nobody else, with which they hold conversations apparently very interesting to themselves : they are always earnestly intent, in appearance, upon something, which, however, can rarely be comprehended by the attendants : they have an eager, often a fierce look : they throw about their arms much, and are perpetually attempting to rise from bed, and to go somewhere, yet, if permitted, they know not what they would be at : they are exceedingly quarrelsome with their attendants : they attend not to their evacuations : they know not where they are, though, perhaps, in their own bed-chamber, and they as little know those about them ; yet if forced to attend, they take it very ill to have their knowledge questioned,

questioned, being very irascible: their skin is hot, often dry, or if sweating, only partially so about the upper parts of the body: their pulse is quick, but full and sharpish in the stroke, and tolerably uniform: their tongue is dry, lips and teeth covered with a black fur: they are mostly thirsty, preferring cold water to every other beverage. This complaint is much more rapid in its progress and termination than the former species.

“ I have thus attempted a description of delirium, with some of its concomitant symptoms; but to give them all would require a detailed account of every species of fever; I have therefore mentioned such as seemed most connected with it; and shall only farther mention a few remarks concerning it.

“ Delirium is most frequently attendant upon the acme of fevers, but it likewise is sometimes almost the very first symptom of them, in which suicide, or an attempt at it, is often the consequence. I have known several of these attempts which have not succeeded, and have almost ever found them owing to fever preceded by delirium. This fact I wish to be more known, and farther descanted upon, than my present limits will permit.

“ Delirium likewise often lasts for a time after fever subsides. Of this kind is that species which follows the fevers of lying-in women, which has been often mistaken for madness, but which is very curable, and without return.”

The author proceeds to discriminate some of those affections from other disorders with which they may be confounded: the chief of these are hypochondriacal and hysterical diseases, the description of which we recommend to the perusal of our readers,

38. *Case of a Gun Breech penetrating the Cranium, and remaining within it two Months, previously to the Death of the Patient.* By Mr. JOHN WALDON, Surgeon, of Great Torrington, Devonshire,

A portion

A portion of the frontal bone and dura mater a little above the sinuses was knocked away, and a considerable quantity of brain was found on his clothes. He retained his senses. A poultice was applied. The head of one of the screw pins, which fastens the lock to the stock, was removed the next day from beneath the integuments. Several serious symptoms arose in the evening of the seventh day, but disappeared by morning:—from this time his convalescence was apparent daily. On the twenty-eighth he was taken ill, and a large portion of the os frontis, in a state of exfoliation, projected from the wound, which was removed by a free division of the integuments. As the integuments were dividing, the knife grated on a hard body, very unlike bone, which yielded to pressure; this was recognised as the breech of the gun, and removed with the forceps. Paralysis ensued; he died on the third day after the extraction, under complete subsultus tendinum. From the direction of the breech, (a drawing of which accompanies the case,) it must have extended nearly to the centre of the brain.

39. *Sketch of a Description of a Species of Scarlatina Anginosa, which occurred in the Autumn of 1798.* By JAMES SIMS, M. D. &c.

The species of fever here treated of was extremely sudden in its attack. “The patients were apparently as well perhaps in the morning as for a considerable length of time, when all at once in the evening they were seized with great sickness, retching, and vomiting of bilious matter. This was followed quickly by heat of skin, headach, thirst, and quickness of pulse; to which, before or in the morning, was added that peculiar scarlet efflorescence from whence the disorder is denominated. The danger of the disorder afterwards was usually in proportion to the virulence of these first symptoms. The retchings continued, in bad cases, at intervals during the greatest part of the disease. In these cases also the inflammatory symptoms increased greatly during

during the first days, particularly the heat of skin and strength of pulse, which latter was as full as often in pleurisy, but not attended with so much hardness. The tongue appeared scarcely changed, only inclining to a little more redness; the eyes had likewise a slight red suffusion. The bowels were not lax of themselves, nor were made so by very gentle doses of medicine, but when purged were apt to be too much so.

“ About the third, or beginning of the fourth day, a redness and swelling of the face, or oftener of one side of the face, was conspicuous, affecting the nose, and preventing the freedom of respiration through that organ. At the same time also swellings appeared in the throat on each side under the jaw. These last increased very rapidly, so as in about two days to acquire such an extraordinary size as to force the chin upwards, and to make apparently a straight line from it along the throat and sternum. In some extreme cases, the face, instead of being perpendicular, was almost horizontal, being held more out of its natural position than upon trial I find I can force mine by any muscular exertion, even at the expense of considerable pain. This appearance, however, I am convinced, was heightened by the whole hollow of the throat being filled up by the tumours. The degree of this intumescence was very various in different persons; but there was another much more uniform symptom now attendant upon the disorder, insomuch that I have not heard of a single severe case where it was wanting. This was a great discharge from the nostrils, which came on about the fifth day. This was at first whitish, then yellow, but afterwards it became darker with a most intolerable fœtor. This most offensive discharge continued all the rest of the disorder, where it terminated fatally. About the seventh day the pulse, which had hitherto kept up tolerably, sunk entirely; their understanding also totally deserted the patients. They now lay
a miserable

a miserable spectacle of suffering humanity, breathing with labour through their mouth, which remained wide open, and which, together with their teeth and lips, became gradually covered with a black dry fur. The scarlet eruption did not decline at the time I remarked in my former treatise, but remained until the eighth or ninth day, when it gradually gave way to that purple appearance resembling a person chilled with frost, which is often seen in the end of typhus, and which is a sure forerunner of destruction. This, however, at the last changed to a blue or livid colour, especially about the throat; the tumours subsiding, but not totally disappearing, whilst life remained. The fatal period was about the tenth day in those cases which went on by the gradations just mentioned, the patient surviving without pulse or senses a longer time than is usual in fevers of almost any kind.

“Although the tenth day has been mentioned as a not uncommon period of fatality, which, I believe, few survived who did not recover, yet in some it run through all its stages with much more rapidity, killing so early as even the fourth day. But it seemed more proper to describe the tedious cases, as they shewed the gradations of the disease more distinctly. The rapid cases also seemed to differ from them in nothing but in the quickness with which they went through the various stages.

“It may seem surprising that nothing has been said about the inside of the throat. The fact is, the patients complained little, and but little, of pain there in the beginning, and in a few days even this was no more heard of. Deglutition was throughout scarcely, if at all, impeded. As to ocular examination of it—in the favourable cases I could perceive little amiss, and in the others I was deterred from so dangerous an experiment by the great attendant factor.”

40. *Physical Hints and Queries.* By JAMES SIMS, M. D.

This article occupies seventeen pages, and is of such a nature

nature that it is impossible to analyze it in a satisfactory manner.

41. *History of a Case of encysted Dropsy, with an Account of the Appearances on Dissection.* By SAYER WALKER, M. D.

In this case of ovarial dropsy, which succeeded to a difficult labour, there was nothing extraordinary, except the immense size of the tumour,—it weighing ninety pounds when removed from the body.

42. *A Case of Cæsarean Operation.* By WM. WOOD, Surgeon, of Manchester.

Upon examination, the pelvis of this woman was found to be very much deformed: the space from the symphysis pubis to the os sacrum would only permit the points of two fingers. A consultation was held, the operation was determined on, and performed in the usual manner. Her child was alive, and still continues strong and healthy. The placenta was brought away without much difficulty, and the wound secured by the interrupted suture. She died seventy-six hours after the operation. A description is given of the appearances on dissection, in which nothing remarkable was observed besides a gangrene of the lower portion of the uterus. The dimensions of the superior and inferior aperture are minutely detailed by the author; but it is only necessary to mention, that *the largest circle which could be formed in any part of the superior aperture, when the bones were deprived of their soft parts, did not exceed one inch in diameter.*

*** A printed document has been lately sent to us, entitled, “A further Statement of the Case of Elizabeth Thompson, upon whom the Cæsarean Operation was performed in the Manchester Lying-in Hospital; in addition to that published by Mr. Wood, in the *Memoirs of the Medical Society of London, Vol. V.* By CHARLES WHITE, and RICHARD HALL, Men-midwives Extraordinary, and GEORGE TOMLINSON, and JOHN THORP, Men-midwives in Ordinary to that Charity.” The information contained in
this

this paper is highly deserving the attention of medical gentlemen, but our limits do not permit us to enter into the particulars. We are sorry to find that a difference of opinion has taken place betwixt two of the practitioners concerned in this operation, and that the facts relating to it have been variously represented.

D. T.

ART. VI. *Geschichte eines epidemischen Fiebers, &c. i. e. The History of an epidemic Fever which reigned in the Years 1792 and 1793 in the District of Asperg, in the Dutchy of Wirtemberg.* By FREDERIC WILLIAM VON HOVEN, M.D. Physician to the Court.

AFTER a series of annual failures in the crops, and a variety of the most distressing occurrences to which the husbandman is exposed, there broke out in the spring of 1792, in the district of Asperg, which contains 1200 souls, an epidemic distemper, which rapidly increased as the summer advanced, and in the month of October of that year was found to affect 733 of the inhabitants. Forty-two people died of it: infants under one year old were secure from its attack, and very old people suffered little. From the first day of the disease until the seventh, every symptom of the common bilious fever was to be observed. The second stage began with an eruption of petechiæ; and in this, uncommon prostration of strength, with a great tendency to disorganization, were to be observed. Those who had taken an emetic early in the disease often escaped the second stage, or at least recovered without sustaining the worst symptoms. The period of greatest danger was about the fourteenth day. In those who recovered no evident crisis was to be observed.

In the month of July the disease took on a more atonic aspect in the first stage than it had before done. The pulse was not full and hard, but small, quick, and irregular.

Patients

Patients of a temperament easily excited, had the nervous system always much affected in this complaint. A delirium frequently occurred about the seventh, or ninth day; and often alternated with fainting and cramps. In all such patients the disease was evidently shorter than in others. It is very remarkable, that the small pox, which raged at the same time in Asperg, did not assume any part of the character of this fever, but was of the most benign nature.

The cure was in the beginning quite antigastric. Emetics were highly beneficial; and many patients, by taking one early in the complaint, were thereby secured against its progress. When exhibited during its course, it was one of the most powerful means for rousing the system from that kind of paralysis from which the worst symptoms followed. If these occurred, the author had recourse to the bark, to which he added either small doses of emetic tartar, or serpentaria, wine and camphor, according to circumstances. Blisters and sinapisms, as exciting remedies, were also employed. The flowers of the *Arnica montana* were only used when the sensibility of the *primæ viæ* was much impaired. When the skin was hot, accompanied with profuse sweats, or hæmorrhage, the diluted vitriolic acid was employed.

When the nervous system was morbidly sensible, large doses of laudanum, with small doses of emetic tartar and cold applications to the head, were very beneficial. Sixty drops of *Tinct. opii* were often given in two hours time. If there were tension and pain in the abdomen, denoting partial inflammation, it was supposed to arise either from a collection of fæces, or from mere atony; and it was found to yield best to mineral acids, cold glysters, and cold applications.

The second part of this work contains the author's opinions concerning the nature of this fever, which is shortly as follows. He conceives the remote causes to operate chiefly on the nervous system, and to produce a disturbance in it; and all the varieties of fever are only modifications of this. If emetics do good in this complaint, it is not by withdrawing

a source of irritation and weakness from the stomach, so much as by its effects on the nerves of the stomach, and through these on the whole system of nerves. The varieties of fever, according to our author, may arise from—1st, The nature of the nervous irritation; 2dly, From the difference in the receptivity of the nerves for the same; 3dly, From the peculiar idiosyncrasy of nerves in particular cases, combined with their receptivity for the nervous stimulus. He enlarges very much on these points, strenuously endeavouring to support what he here states, both by argument and cases.

The form of fevers, says the author, in regard to their duration, is either acute, or chronic; in regard to their course, is either continued, remittent, or intermittent; and in regard to the nature of their symptoms, either inflammatory, bilious, pituitous, exanthematic, nervous, or putrid. These doctrinal points, which are greatly enlarged on in the work, the author applies to the epidemic fever he has here described.

I. L.

ART. VII. DR. WILSON *on Febrile Diseases.*

(Continued from page 272.)

DR. WILSON next proceeds to consider the *modus operandi* of the remedies employed during the paroxysm of intermitting fevers,—as that of emetics, cathartics, opium, and blood-letting; in which the reader will find much sound and physiological reasoning.

The second section of this chapter delivers the treatment of an intermittent during the apyrexia. This is, without doubt, the most important part of the practice in agues, and that which, strictly speaking, can alone be regarded as curative.

The indications in the apyrexia, according to the author, are, to restore the patient's strength, and to prevent the return of the paroxysm. The first is answered chiefly by an attention

tion to diet and exercise; the other by medicines. Dr. Wilson then treats of the diet and exercise during the apyrexia at considerable length, because it is the least generally understood. Much important information will be found in this section, which we lament we cannot abridge. Where there is much inflammatory diathesis, the diet must be such as to counteract this habit of body; whilst, on the other hand, when debility prevails, a full and nourishing diet should be enforced. The particular kinds of aliments as suitable to the different constitutions are detailed. In regard to exercise, every kind that fatigues should be refrained from; friction, sailing, the motion of a carriage, riding on horseback, swinging, spring chairs, may be employed with advantage.

Having now reached page 254, we come to the most important part of the treatment in agues, and of the medicines which are employed during the remission or apyrexia. "These," says our author, "may be divided into two classes: such as are exhibited during the whole, or at least a great part, of the apyrexia; and such as only prove beneficial when the paroxysm is expected.

"In the first place, of those exhibited during the whole or a great part of the apyrexia.

"Of all the medicines, recommended in intermittents, none has been so generally employed as the Peruvian bark. On this medicine, indeed, the generality of practitioners wholly depend for the cure of these fevers. It therefore particularly demands attention.

"This valuable medicine is the bark of a middle-sized tree, a native of Peru. The circumstance which led Europeans to pay attention to the Peruvian bark, was a remarkable cure performed by it on the Countess del Cinchon, the Spanish viceroy's lady, in the year 1640. It is said, that the Indians were not ignorant of its virtues as early as the year 1500. In 1649, a Jesuit brought a considerable quantity

of it into Italy, which was distributed by the fathers of that order at a high price over a great part of Europe, from which circumstance it got the name of Jesuit's bark; and, about the same time, the Cardinal de Lugo imported a quantity of it for the use of the poor at Rome. 'When first introduced (Dr. Cullen observes) it was found to cure intermittents very readily; but whether it was that a medicine of more seeming efficacy was at the same time brought into Europe, or whether timid practice lessened the dose, it went out of credit, and was not till thirty years afterwards restored by Talbot.'

"The bark is an astringent bitter, with some degree of aromatic flavour; to none of these qualities, however, can its power of curing intermitting fever be attributed, since no combination of astringents, bitters, and aromatics, is found equally effectual.

"A variety of prejudices respecting the bark prevailed for a long time after its introduction into Europe, and prevented its general use. The more ancient of these do not even deserve to be mentioned, such as, that those who use this medicine die within a year, or, according to others, within seven years; that it is particularly pernicious to fat people, &c. The prejudices which in many places still interfere to prevent the free employment of this medicine arose chiefly from the nature of the fevers in which the bark is recommended.

"Intermitting fever, it has been observed, is often followed by obstructions of the viscera, dropsy, &c.; these, which are the consequences of the disease, were, and in some places still are, attributed to the bark.

"It is now well ascertained, however, that there is no foundation whatever for this opinion. Dr. Millar declares it his opinion, contrary to what he once thought, that the fever, and not the bark, is the cause of the obstructions and dropsies which frequently supervene on agues, and that the bark

bark is the best means of preventing these affections. Dr. Jackson remarks, that he always found dysentery, dropsy, and visceral obstructions, most common where the bark was most sparingly employed. When the ague, Dr. Lind observes, was stopped by the bark immediately after the first or second fit, as in my own case and that of two hundred of my patients, neither a jaundice nor dropsy ensued; whereas when the bark could not be administered on account of the imperfect remissions of the fever, or when the patient had neglected to take it, either a dropsy, jaundice, or a constant head-ache were the certain consequences, and the degree of violence was proportioned to the number of the preceding fits, or to the continuance of the fever.

“ The bark, indeed, is by many regarded as among the best means we have of removing such affections, when they are the consequences of agues. Dr. Brocklesby recommends it in cases of visceral obstruction after the use of mild and repeated emetics and cathartics; and Dr. Strack remarks, that he has found the bark more powerful than any other medicine in removing indurations of the spleen, and has observed it successful in the dropsical affections which supervene on intermittents.

“ It is also a prevalent opinion in many places, that agues cured by the bark more frequently return than those which leave the patient after running their full course. But Torti has justly observed, that if fevers cured by the bark sometimes return, those removed by other means are no less apt to do so; and when overcome by the efforts of nature alone, they frequently attack the patient a second time or oftener. Since these fevers, he continues, in whatever manner they are cured, have a tendency to return in autumn, but not in spring and the beginning of summer, we must, with Morton, conclude, that the disposition of the fever, and not the nature of the remedy, is in fault. Numberless observations might be quoted to the same purpose. In

short, amidst all the prejudices entertained against the bark, wherever it has been fairly tried, it has proved both a safe and successful medicine in intermittents. Never was there any medicine, D'Aquin observes, known to cure fevers so quickly, and with so much safety. The authority of Sydenham is not to be overlooked: ‘Vere affirmare possum
 ‘non obstante tam vulgi quam perpaucorum e doctis pre-
 ‘judicio, me nihil mali ægris accidisse ab ejus usu vidisse
 ‘unquam, vel cum ratione suspicare potuisse.’ If other authorities be required, I might here repeat the name of almost every author I have had occasion to mention. So generally, indeed, is the innocence of the bark admitted and confirmed by so extensive an experience, that no authority against it can now claim any attention.

“Although almost all practitioners at present employ the bark in agues, at least when they are protracted beyond a few paroxysms, there is some difference of opinion concerning the period of the disease at which it ought to be exhibited, the preparation of the patient, &c.

“We determine when and how the bark is to be given by attending to the following circumstances:

“1. The period of the disease.

“2. The nature of the symptoms, particularly the presence of the inflammatory diathesis, or debility.

“3. The climate and the season of the year.

“4. The age and habit of the patient; and,

“5. The nature of the epidemic.

“1. Of the period of the disease, most proper for the exhibition of the bark.

“Where the debility is great, the symptoms consequently alarming, and much danger to be apprehended if the fever again recurs, especially where the apyrexia is short and imperfect, it is often advisable to begin to give the bark about the end of the hot fit; for were it delayed till the remission takes place, it might be impossible to
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throw in a sufficient quantity before the succeeding paroxysm. And if the patient be much reduced, and the symptoms termed putrescent have made their appearance, the bark, as I shall presently have occasion to observe more particularly, is proper after the remissions have become so slight as to be hardly perceived. The general plan in intermitting and remitting fever, however, is not to give the bark till complete apyrexia, or an evident remission of the symptoms, takes place; it is then given in various doses and at different intervals, as the state of the complaint requires.

“ There has been some dispute respecting the best time of the apyrexia for the exhibition of the bark. Many give it immediately after the paroxysm, and at intervals till the fever returns; others only during a few hours before the paroxysm. We must determine in which of these ways the bark is to be exhibited, by attending to the duration of the apyrexia, the quantity of bark required, and the quantity which the stomach is capable of receiving in one dose.

“ When the apyrexia is short, and the quantity of bark required considerable, it must be given immediately after the paroxysms, and continued till the return of the succeeding fit at longer or shorter intervals, according as the case is more or less urgent, and the stomach able to bear it. On the other hand, when the apyrexia is long, and especially when a great quantity of the bark is not necessary, its exhibition should be delayed till within six or eight hours of the time at which the paroxysm is expected. For a considerable quantity given at this period is more likely to succeed than the same quantity in smaller doses, throughout the whole of a long apyrexia.

“ From the observations that will be made on the *modus operandi* of the bark, it will appear probable, that in the cure of intermittents this medicine acts chiefly by its effects on the stomach and intestines, and that on this account

our endeavours should be directed to have a proper quantity of bark in the primæ viæ, at the time the paroxysm is expected.

“ The period then, at which the bark is to be exhibited in agues, is during the apyrexia, and particularly towards the end of it, if it be long. As soon as the fever returns, the exhibition of the bark should be discontinued.

“ Many attempt to determine the quantity of bark which will with certainty remove an intermittent; this, however, depends on the severity of the disease, compared with other circumstances which will be pointed out as we proceed. It may be remarked upon the whole, that tertians require more bark than quotidians, and quartans than tertians.

“ The next thing to be attended to in prescribing the bark, is the nature of the fever. When the pulse is strong and full, and still more when it is hard, when the face is flushed, and the heat considerable, especially when these symptoms are accompanied with rheumatic or pleuritic pains, or a difficulty of breathing, even although the apyrexia be complete and long, the bark must not be exhibited, till such symptoms are removed by the means already pointed out in the treatment of the paroxysm.

“ It is chiefly at the commencement of the disease that the inflammatory diathesis prevails; and when this is corrected, mild, especially vernal intermittents, often yield spontaneously. The continuance of disease always tends to overcome the inflammatory diathesis; thus we constantly find, as was observed on a former occasion, that however well marked this diathesis is at the commencement of fever, it always disappears in its progress. On this account practitioners have found, that many intermittents yield to the bark with more ease, after they have run through several paroxysms, than at their commencement.

“ Many, from this circumstance, have been led to lay it down as a general rule, that the bark is not to be given at
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the commencement of agues; and this rule they found the more useful, as it was often necessary to clear the primæ viæ before the bark could be exhibited. Such appear to be the sources of the prejudice against giving the bark at the commencement of intermittents; for a prejudice it certainly is, when made a general rule. If confined to those cases in which the inflammatory diathesis prevails, it is the result of universal experience.

“ We are not, however, in such cases, as Dr. Brocklesby and others recommend, to delay the use of the bark till the continuance of the disease has overcome this diathesis. This would often be attended with the worst consequences. We are only to delay it till, by the proper use of vigorous means, we have corrected that state of the system which renders the exhibition of the bark improper. There is nothing in the nature of intermittents, except their being frequently attended by the inflammatory diathesis, which prevents the use of the bark at their very commencement, that is, after the first paroxysm.

“ Wherever the pulse is feeble and quick, and the strength greatly reduced, the early exhibition of the bark is indispensable. Nay, it appears, from the observations of Mr. Clark, as well as those of others, that where the symptoms of typhus are well marked, the bark is to be exhibited even during the paroxysm.

“ While the inflammatory diathesis is present, the bark proves the more hurtful, the more the fever shews a tendency to become continued. The use of the bark in these circumstances indeed often renders it so.

“ The contrary of this observation is true of the cases in which debility prevails; in these, provided the remissions are still distinctly marked, the greater tendency the fever shews to become continued, the greater is the quantity of bark required; and the more the patient is capable of receiving, the greater tendency the fever has to resume the

intermitting form. These observations, the truth of which must strike every one who peruses with care the works of the original authors on the subject, have been frequently overlooked, and much confusion has arisen from writers attempting to lay down, as generally applicable to the treatment of agues, the maxims of practice, which they found suited to the particular cases which fell under their own observation.

“ In the treatment of agues, more attention has been paid than seems proper, to the state of the stomach and bowels. It is a very prevalent opinion, that while the stomach and bowels are loaded, whatever be the state of the symptoms, the bark ought not to be exhibited. Intermit-
tents, Dr. Mead observes, are not safely cured by the bark until the primæ viæ have been cleared; and almost every writer on the subject makes similar observations.

“ When the symptoms are not urgent, and especially when there is any degree of the inflammatory diathesis, if there is reason to suspect the presence of irritating matter in the stomach and bowels, it is proper to delay the use of the bark till after the operation of an emetic and cathartic.

“ But in urgent cases, and where there is no inflammatory diathesis, the bark ought not to be delayed an hour on account of the state of the stomach and bowels. Nay, it even appears from the observations of Dr. Jackson, Dr. Donald Monro, and others, that actual vomiting and purging should not induce us to delay the exhibition of the bark, when the state of the fever requires it. ‘ I may remark,’ says the former of these authors, ‘ that the bark was often rejected by the stomach, and in some cases past off almost instantly by stool, yet the course of the fever seemed to be no less effectually checked by it than when such effects did not occur.’—‘ In violent cases,’ Dr. Donald Monro observes, ‘ where it was necessary to give the bark before emetics and cathartics could be exhibited,

hibited, I often gave it along with a cathartic, and found that keeping up a catharsis did not prevent the bark curing the ague.' From these and similar observations it appears, that the remark of Dr. Millar and others, that the exhibition of the bark can be of no service while a diarrhoea continues, is unfounded; or, at least, not to be admitted in its full extent.

“ From the same observations also, we must infer that the common practice of giving large doses of opium, and other medicines, to allay spontaneous vomiting and purging, in order to exhibit the bark early in urgent cases, is often improper; since the continuance of these will not prevent the effects of the bark, if it can be made to lie on the stomach only for a short time, and the dose be constantly repeated; and by checking them we lay up a fruitful source of irritation, which never fails to increase the fever.

“ In less urgent cases, where the immediate exhibition of the bark is not necessary, if spontaneous vomiting and purging occur, the proper treatment is to promote these evacuations by diluents, till the primæ viæ are sufficiently freed from their irritating contents; and then to allay the commotion excited by opiates, before we order the bark.

“ The climate and season of the year influence our practice in the use of the bark. As in sultry climates, diseases run their course rapidly, and the change from a state of increased excitement to that of debility, in the fevers of such climates, is often very sudden; evacuations, although they seem necessary at their commencement, often prove fatal by increasing the subsequent debility. In these climates, therefore, when the symptoms are not very urgent, but a full pulse and other signs of the inflammatory diathesis present, instead of preparing the patient for the bark by blood-letting, it is often safer to defer the febrifuge till a few paroxysms of the fever have removed this diathesis; and at most to promote this effect by cooling laxatives, and diluent clysters.

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“ When the inflammatory symptoms run so high as to bring the life of the patient into immediate danger, we must in every part of the world have recourse to blood-letting. And we are also to remember that the continuance of violent excitement, even where life is not in immediate danger, is itself a highly debilitating cause, and will often debilitate more than a well-timed blood-letting, which relieves it. In cold climates, fevers of all kinds are more generally accompanied with inflammatory symptoms, and none more frequently than agues; evacuations previous to the use of the bark, therefore, are more necessary in these climates, and must often be carried to a greater extent. It is fortunate that in such climates they are not attended with the same danger.

“ Even the season of the year in the same climate influences the exhibition of the bark. In vernal agues, from the greater prevalence of inflammatory symptoms, evacuations previous to the exhibition of the bark are more necessary than in autumnal intermittents; and they are also safer. It is in the latter season that debilitating causes are most apt to change these fevers to the continued form, and the early exhibition of the bark is less frequently improper, and more generally necessary.

“ 4. In prescribing the bark we must also attend to the age and habit of the patient. If he be young and plethoric, the pulse will often be full; and evacuations, previous to giving the bark, will frequently be found necessary. When the patient is old, or reduced by low diet, previous disease, or any other cause; it is seldom necessary, in agues unaccompanied by any tendency to local inflammation, to prepare him for the bark in any other way, than by a gentle emetic and cathartic when the stomach and bowels happen to be loaded. In these cases the bark should be given in considerable quantity during the first or second remission, not only because in debilitated habits the continuance of the

the fever is most to be dreaded, but also because wherever there is much debility a greater quantity of bark is required for the removal of the fever. It is to this circumstance, together with the power of habit, that we are to attribute the obstinacy of protracted cases.

“ 5. One circumstance to be constantly kept in view in the treatment of agues, is the nature of the prevailing epidemic. When it is frequently attended with local inflammation, or when the inflammatory symptoms of the fever itself run high, the bark must be used with caution; and never where there is any appearance of the inflammatory diathesis till after proper evacuations. When, instead of these symptoms, the epidemic is accompanied with much debility and a tendency to assume the form of typhus, the bark must be given early, and in large quantity, and evacuations of every kind cautiously advised.”

Before the author leaves this part of his subject, he treats at large, and very judiciously, of the different forms in which this medicine, and some other kinds of bark, has been prescribed.

C. B.

(*To be concluded next month.*)

ART. VIII. Dr. TROTTER's *Medicina Nautica*, Vol. II.

(Concluded from page 110.)

THE next section contains an interesting history of a troublesome and singular species of malignant ulcer. Mr. Caird, surgeon of the Queen Charlotte, gives the following account of it.

“ Several men who had been bled for different inflammatory diseases, such as catarrhs, sore throats, &c. complained that the orifice in their arms did not heal kindly, but became painful, somewhat swelled, hard, of a livid red colour, and which excited strong suspicions that the wound had been made by a foul lancet, that had been employed for other purposes, such as opening abscesses that could
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communicate infection. This opinion, however, was soon given up; for other lancets, known to be in perfect order, and used by different mates, did not prevent similar appearances in other patients. Mr. Caird had at one time so many as twelve of this description in his list; in one of whom the affected part swelled and inflamed rapidly, ulcerated, and spread, till it assumed so bad an appearance that he was sent on board the *Medusa* hospital-ship, about the beginning of May, while the fleet lay at St. Helen's.

“ The patient was a strong, healthy young man, and a seaman stationed in the main-top. The wound that was originally made with the lancet was now an ulcer of the size of a crown-piece, covered with a sloughy matter, black and foetid: the edges of the sore were ragged, and, for a considerable space round, hard and livid; but a degree of shining redness extended much farther, with tumefaction both above and below the ulcerated part. The pain was excruciating, extending downwards to the ends of the fingers, and up to the shoulder and arm-pit. The lymphatics leading to the axilla could be distinctly felt, but the glands above were not enlarged. Violent rigours accompanied this condition of the sore, resembling the cold stage of an intermittent, alternated with heats and sweating, but not producing a solution of the fever: thirst, sickness, and vomiting, were also concomitants. The eyes and countenance were flushed, severe head-achs, and not without slight delirium at times; the pulse, though frequent and full, was by no means hard. He was not bled, as the accident was caused by that operation; but he took brisk purges of *calomel* and *jalap*, in order to bring him down. The applications to the arms were fomentations and emollient poultices. Such was the treatment of the ulcer during the time the fever and inflammation subsisted; and poultices were continued till the sloughs separated, with which the febrile indisposition disappeared. After this the surface of the

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sore

sore looked clear and florid. A considerable hæmorrhage took place from one of the veins being eroded, but was soon restrained by gentle compression below the ulcerated part, and did not return.

“ This ulcer sometimes yielded so little pus, that it was difficult to remove the dressings; and whenever it seemed disposed to assume this condition, we made free with stimulating ingredients, either sprinkled over the surface or mixed in the ointment; the chief of which were Hydrarg. nitrat. or *Ærug. æris*. The patient often complained of pain in the affected part; and there was always a necessity for a large dose of *Tinct. opii* at bed-time. This pain, when violent, always foreboded some change in the complexion of the sore, that indicated the application of the metallic salts. He also took bark at this time. After the fever subsided, it was surprising to see the great debility that followed, and a degree of emaciation that could scarcely have been expected. But as the appetite returned the strength was quickly recruited, by a diet at once delicate and nourishing, and which afforded plenty of variety, so that the stomach was never palled with a repetition of the same kind of food. In six weeks from the time he left the *Queen Charlotte*, the ulcer scarcely needed a pledget, when he was sent on shore to the hospital with others. He was afterwards invalided, from the stiffness and contraction that remained at the elbow.

“ On the 10th of June the objects for hospitals in the different ships were, by signal, sent on board the *Medusa* to be carried to port, which increased our number to sixty-five, the greater part of whom were ulcers, and evidently of a peculiar kind. The *Saturn* also sent some bad cases.

“ While these men remained in the hospital-ship the treatment varied little from what has been mentioned above: cold applications were sometimes substituted for the fomentations,

mentations, while the inflammation lasted, and seemed to answer better. Much advantage was gained by frequently changing the dressings, as the discharge in the sloughing stage was profuse and very foetid. In all our hospital practice, we never beheld so many ulcers together that had in so short a space extended over the whole limb, whether leg or arm, with a loss of muscular flesh great beyond example, and leaving the bone quite bare almost the whole length. Some of the Royal Sovereign's people were affected in the back and shoulder, where blisters had been applied that soon degenerated into this foul, foetid, and malignant state of ulceration. Even the scalp was not secure against this disposition of wounded parts.

“ After the fever subsided, and the first sloughs fell off, and the surface appeared tolerably healthy and florid, our hopes of the sore going no deeper were sometimes disappointed. Little florid granulations resembling small strawberries, and not unlike the healthy process of nature in a well-conditioned sore, would frequently appear over the whole surface, or on particular parts, but scarcely poured out any matter. These would sometimes disappear before the next dressing, seemingly by absorption, after which the tendon or bone beneath would be left entirely bare. The sore at this time had not the least foetor. In those cases where a large portion of integuments and muscle had sphacelated, the strength of the patient sunk inconceivably fast, and extreme emaciation in the course of a few days was the consequence. Our wine was of the best quality, and, when desired, was allowed in due quantity: but we were also well stored with fine bottled cyder and London porter. These articles seemed to snatch some of them from the very verge of dissolution, and they were occasionally changed for punch made from the fresh lemon. We had, at the same time, abundance of oranges, and eggs cooked in various forms of pudding. These cases were landed at the hospital;—some terminated

terminated fatally, and a few amputations took place, but other particulars I have not been able to learn.

“ Amidst this group of misery, the state of a man from the *Saturn* was singularly shocking. He justly blamed his own indiscretion, and thus described his disease: He had, while in port, contracted a virulent gonorrhœa; but no uncommon symptoms attended till he returned on shore with leave for a few days. He drank to the quantity of a bottle of raw spirit in the space of a few hours; the effects of which were next morning apparent in the inflamed state of the urethra and parts adjacent. The glans penis swelled rapidly, and a paraphymosis was formed that produced extreme pain: the urine flowed only in drops, and added to his torment. He had also an acute fever, and transient delirium from the pain. It was in vain that Mr. Seeds employed the full force of the antiphlogistic regimen, such as profuse bleeding, quick purges, fomentations, and plentiful dilution. The symptoms advanced by too hasty strides to be arrested by any resources of medical skill. The gland of the penis soon dropped off: but the misery of the patient did not stop there; the whole body of the penis passed quickly through the stages of excessive excitement and inflammation, to complete gangrene and mortification, and separated at its very crura. The whole length of the urethra to the bulb sloughed away, and also the scrotum, leaving the testes and spermatic vessels barely covered with cellular substance. He died.

“ Cases of this kind have been frequent in ships, from the inordinate stimulus of vinous spirit; but there was reason to believe, that in the present instance there was a disposition in the body to malignant ulceration, but certainly aggravated by the quantity of spirit taken into the stomach, which, from its undiluted form, was more likely to induce instantaneous inflammation: the complexion of

the parts also confirmed this supposition, and it is to be remembered that the patient came from a ship that had the malignant ulcer on board.

“ In blistered parts, which assumed the characteristic appearance of this prevailing malady, there were particular spots that inflamed, became dark-coloured and sloughy, which spread in all directions, till the whole extent of the blister was ulcerated. Numerous little vesicles appeared on the margin, to a considerable distance, with inflamed edges: these quickly broke, turning of a dark red colour, in some places united with the large sore, and gave the whole an indented appearance somewhat resembling peninsulas in a sea chart. The vesicles appeared to be lymphatics inflamed by the absorption of the cantharides, which instantly partook of the general disposition to gangrene. During the whole of this process an acute and violent degree of fever raged, with unusual pain of the affected part, which continued till the inflammation on the margin of the ulcer subsided, and the sloughs fell away. This commonly happened in four or five days; but in some cases the inflamed portion turned black and mortified, with a foetid discharge, in less than forty-eight hours.

“ Contused spots, even where the cuticle was not broken, were not exempted from this general tendency to ulcer. But parts that had been scalded or burnt, above all other accidents, most quickly assumed the nature of this horrid sore; spread and inflamed more rapidly, and in the end put on the most formidable appearance; deeper and larger sloughs were the consequence, and symptomatic fever violent in proportion. This was a general remark in every ship.

“ Even in the early stage, and sometimes before the cuticle had burst, so as to expose the naked surface, buboes appeared in the groin and axilla, not to be touched without much pain, and always attended with fever. These, however,

ever, seldom suppurated; but when they did, they constantly exhibited the complexion of the parent sore. In the Terrible, the glands of the groin were more liable to be affected than was observed in the other ships: and in the Triumph only I have heard of them suppurating.

“ Although for the most part these ulcers sprung from some external injury, yet we have met with a number of cases, where neither wound, puncture, scab, or contusion, could be said to have first taken place. A small circumscribed red spot would be first perceived, scarcely to be felt; but in a few hours rising to a pimple, becoming black in the centre, and inflamed round the edges, till it increased in size, swelled and assumed every characteristic symptom, with concomitant fever and subsequent ulceration, sloughs, and foetid discharge.

“ In the Medusa's hospital, at the several times the sick of the fleet were carried to port, were some cases of the common ulcer sent from ships that had never been infested with the present disease. No particular attention was paid to keep these men at a distance from the others; some lay in the cradles next to the worst of the Queen Charlotte's people; yet we observed no disposition in them to put on the malignant form, but continued, while under our treatment, to do well.

“ To correct the bad smell of the matter, we had recourse to none of the usual agents. The lamps for diffusing the acetous vapour were constantly kept trimmed: but our attention was chiefly directed to the speedy removal of the dressings, and by that means we seldom found the effluvia so offensive as not to be approached with ease. While the men with ulcers remained in the Medusa, the duty of the surgeons and mates kept them constantly by the bedside of the patient.”

Several other surgeons here communicate their experience on the same subject.

“ Such is the brief history of this virulent sore, as it has afflicted the seamen in the ships in the Channel. It has also been common among others in Lord Duncan's fleet, particularly the Ganges ; but,” says Dr. Trotter, “ we have obtained no information from that quarter.

“ The striking peculiarities of this ulcer are,

“ 1st. Its rapid progress, by which, in the space of a few days, it passes through the various stages of inflammation, gangrene, and sphacelus, when the injured parts slough away, which puts an end to an acute concomitant fever.

“ 2dly. It has been observed to prevail more in ships in port than at sea, or very shortly after leaving the harbour.

“ 3dly. It has never assumed the complexion of a scorbutic ulcer, which is distinguished by the dark-coloured fungous mass lying over its surface, that, on being removed, is quickly regenerated, and is commonly attended with some symptoms of scurvy, such as soft swellings of the legs, spongy gums, and sallow looks ; on the contrary, in this ulcer, when the putrid parts separate, the surface is of a light florid colour. The scorbutic sore is seldom painful ; our ulcer is attended at times with exquisite torment.

“ 4thly. It has not been relieved by large quantities of lemon-juice, even to a bottle *per diem* ; nay, we have thought that in some cases much harm was done by this practice in the first stage.

“ 5thly. We have not been able to distinguish particular constitutions more liable to be affected with it than others, except the strong and robust ; nor have seamen been more exempt from it than landmen.

“ 6thly. It has occurred in ships where every attention is paid to exact discipline, cleanliness, ventilation, and every circumstance connected with preserving health. It has also been treated by some of the most experienced and able surgeons

surgeons in the navy; and there is nothing peculiar to the soil surrounding the ports of the Channel where it has appeared."

The remainder of this section contains a long extract from the first edition of Dr. Rollo's book on Diabetes, in which he has given "an account of a morbid poison acting on sores, and of the method of destroying it."

The following communication from Mr. Hammick, jun. of the Royal Hospital at Plymouth, is worthy attention:

"Having obtained permission from Dr. Geach, senior surgeon of this hospital, whose kindness and excellent advice I experience on every occasion, to make trial of common hops in those wards which I attend as his assistant; I have now the satisfaction of declaring, that during the last six months I have seen very good effects from hops in poultices and fomentations applied to ulcers of the worst kind, in more than sixty patients received from the ships of war into this hospital. Some of the ulcers proceeded from scurvy, and some from other causes. But though all of them have been sordid, foetid, and extensive, yet the foetor has soon been corrected by these applications, and the ulcers have ceased to spread.

"A large handful of hops are to be boiled in a quart of water, till a strong decoction be formed. Oatmeal with lard or oil is then to be mixed with the hops and the decoction, till the poultice become of a proper consistence. The poultice is then applied to the ulcer without any intervening lint. But previously to this application the ulcers are directed to be well fomented with the decoction. The pain proceeding from the ulcers is soon alleviated, and the ulcers themselves soon cease to spread. They become clean, and in a state to be dressed with lint or any soft ointment."

EXPERIMENTS ON THE NITROUS GAS OF DR. J. C. SMYTH.

The nitrous vapour appears here to have produced no salutary effects, when applied to old ulcers, but, on the

contrary, seemed to do great mischief. Mr. Reily, by whom these experiments were conducted, also relates its inefficacy in destroying contagion on board the Centaur.

This volume of *Medicina Nautica* concludes with several practical cases of fracture, &c. and an appendix of two hundred pages, including “Remarks on some late Proceedings of the Legislature of the State of New York, relative to the Removal of certain Trades and Manufactures from the thickly settled Parts of the City of New York, in an Application of the Mitchillian Doctrine of septic Fluids to the Processes carried on in several Branches of Handicraft Business, particularly the making of Soap and Candles ;” together with “Extracts from a Dissertation on the medical and chemical History of Septon, Azote, or Nitrogene; and its Combinations with the Matter of Heat and the Principle of Acidity. By W. Saltonstall, M. D.” G.

ART. IX. Dr. CRICHTON on *Mental Derangement*.

(Continued from p. 180.)

DR. Crichton begins his observations on the faculties of the mind, and the diseases to which they are liable, by first of all noticing the faculty of *attention*. This, he observes, may be considered as the parent of all our knowledge; but in this, as in all the rest, it is necessary to distinguish between the *faculty* and the *power*. The faculty is the same whether in action or not, the power is the degree of excitement produced by mental stimuli; and therefore varies much in different individuals, and in the same individual at different times. The exercise of attention is in great measure a voluntary act, but not entirely so; hence it is more easily renewed when it has been frequently repeated; especially when the mental stimuli by which it has before been excited, are again applied. It is therefore greatly influenced by

by constitutional proneness to any particular passions and emotions, and by that proneness to others, which is required by education and condition in life. Here the author asks, what is usually meant, when an object excites our attention, and we say it *interests* us, or when we say it does not *interest* us? This *interest*, what is it? To the question no particular answer is given; but we apprehend it may be resolved into the facility with which the mind directs its attention to the object, and the pleasure it derives from the nature or connexion of those impressions which are produced, or recalled by it.

“Attention,” the author is of opinion, “can hardly be said to be ever morbidly *increased*; for although in many instances this faculty is involuntarily engaged for a much longer period of time than is usual, and in a degree which often proves hurtful, yet it cannot be called a disease of that faculty. The attention may be preternaturally arrested, for instance, by a diseased perception, so that the person cannot attend to any thing else; as is the case in various kinds of hypochondriasis, and melancholy; but the reason why external impressions do not, in such cases, produce their full mental effect, is not because attention is morbidly increased, but because it is arrested by the preternatural vividness of the diseased perception. Were it a fault of the faculty itself, the energy with which it acted would be equally great to whatever object it was directed, but this is not the case; which proves that it is a perception only which is diseased.

“The morbid alterations to which attention is subject, may all be reduced under the three following heads:

“1st. The incapacity of attending with a necessary degree of constancy to any one object.

“2dly. A total suspension of its effects on the brain.

“The incapacity of attending with a necessary degree of constancy to any one object, almost always arises from an

unnatural or morbid sensibility of the nerves, by which means this faculty is incessantly withdrawn from one impression to another. It may be either born with a person, or it may be the effect of accidental diseases.

“The second diseased state of attention may arise from a great multiplicity of causes, some of which are *corporeal*, and others *mental*.

“The *corporeal* causes appear to be capable of being reduced under two heads, or classes.

“1st. Causes of debility that operate by exhausting the principle of irritability, and consequently diminish the secretion of the sentient principle, and which of course weaken both external and sensorial impressions in force and clearness; and which therefore naturally shorten their duration in the brain.

“2dly. Organic diseases of the brain, impeding, to a certain extent, the transmission of impressions.

“The *mental* causes which weaken this faculty, are also of two kinds.

“1st. Debility, arising from neglecting to exercise the faculty sufficiently; and,

“2dly. The over-exercise or abuse of its powers.

“The first of these is a direct cause of habitual inattention; the second is an indirect cause of a species of diminished attention, which is for the most part of a transitory nature.”

Some remarks are here introduced on the precautions necessary to cultivate habits of attention in youthful minds; and two cases are related, to illustrate the nature of both classes of disease in this faculty.

The next chapter treats on mental perception, and its diseases. In considering the faculty of perception, Dr. Crichton combats at some length, the opinion of Dr. Reid and Dr. Stewart, “that external objects affect the mind, not through any medium, such as the nerves and brain, but that

that they act immediately on it;" so that, "it is external objects themselves, and not any species or images of these objects, that the mind perceives." The principal argument adduced against this opinion, rests on the different excitement of the same ideas in the mind by the immediate application of sensible bodies, and the recollections of memory; but as this is a matter that admits a good deal of discussion, we must content ourselves with giving the author's opinion, without entering into the controversy.

Of the morbid alterations to which the faculty of perception is subject, two only are to be considered as idiopathic, namely, fatuity, and vertigo. All the rest are sympathetic, and arise from diseases of the external senses.

In the next chapter, on memory, its properties of recognition and recollection are defined and distinguished. The latter leads the author very naturally into a discussion of the opinions which have been advanced concerning the association of ideas. He appears to coincide in opinion with Mr. Hume, that all the principles of the association of ideas are reducible to resemblance, contiguity of time and place, and cause and effect. But then he distinguishes between the association of ideas with each other, and that which takes place with passions and emotions. The power of attraction Dr. Crichton mentions also, as a principle of association, by which ideas become classed in the mind in a different order from that in which they are first presented to it.

The attempts made by different writers to explain the phenomena of memory, on the supposition of a mechanical impression or alteration in the fibres of the brain, are noticed and contradicted. Different instances of the astonishing power of this faculty in some persons are produced; and the causes of its strength or weakness are enumerated; the defects of memory are illustrated by cases of its failure, and of that confusion by which one word or letter is sometimes substituted for another.

“There is also a species of insanity of so surprising a kind, that nothing but its frequency prevents us from regarding it with that astonishment which it is well calculated to excite : a person conducts himself like a man of sense, in every respect, except in one particular circumstance ; but in that, his thoughts and actions are in such opposition to those of other men, that he appears to them to be evidently deranged. This is the *melancholia moria* of Sauvages. In many cases it is a species of hypochondriasis, arising from corporeal causes, as for instance, when a person erroneously believes any part of his frame to be altered from its natural form ; but in other cases it arises from mental causes. The judgment is generally naturally weak, or preternaturally debilitated by various circumstances, and then certain predominant affections and passions give birth to the diseased associations ; as when a person believes he is endowed with a prophetic spirit ; that he is the intimate companion of kings and princes ; that he ascends up to heaven, or descends to hell, &c.

“As the insane idea of such people generally consists of certain combinations of thought, which experience does not yield, but are formed in the mind, either by diseased feelings, or strong passions and desires, this malady appears to belong rather to the subject of imagination, than to this place ; and as the history of its rise and progress cannot be fully considered until the nature of that faculty has been explained, we shall defer speaking of it till then.

“Although we are indebted to the principle of association of ideas for all the benefits of knowledge and genius, yet it often becomes the source of much misery and distress, as well as of many false judgments, which although not commonly considered as deliria, are no less aberrations from sound sense. When any accident or calamity happens to us, so as to excite some strong passion, every thing which afterwards brings it suddenly to our recollection, occasions
nearly

nearly the same powerful emotions as happened at first. Suppose a person to have been much frightened, and hurt by some fierce animal, the sight of a similar one occurring at any period of life afterwards, will often excite violent alarm in the mind, even although the animal should be tame and secured. If the sight of a disagreeable, or disgusting object, has made the stomach revolt, so as to induce nausea and vomiting, the mentioning the name of the object at any time afterwards, will do the same thing. The antipathies and aversions which many people have for certain things, can only be explained on this principle. Of those who escaped from the earthquake at Lisbon, I formerly knew one gentleman, who, if he accidentally heard the word earthquake mentioned in company, became almost instantaneously delirious. Boileau, when a child, happened one day, when he was at play, to irritate a turkey-cock, to a prodigious degree. He accidentally fell backwards, and the enraged animal flew at him, and wounded him in such a delicate part, and in so ruinous a manner, as rendered him incapable of ever afterwards enjoying the advantages peculiar to his sex. Weickard, and several others, who mention this circumstance, ascribe to it the hatred which the poet afterwards shewed to women, and all who admired them; and to the Jesuits, who were supposed to be the first who introduced the turkey fowl into Europe. *Philosophische Arzt.* B. I. bl. 7.

“ Upon the same principle, many associated ideas which are peculiar to certain countries, and which give rise to a number of usages and customs that appear unreasonable and cruel, and even barbarous to others, may be considered as national vesaniæ. Of this kind is the association of ideas which was taught the Romans, that it was much nobler to put a voluntary end to their existence than to outlive a disgrace; of this kind is the associated ideas instilled into the tender mind of the female Hindoo, who believes that a voluntary

luntary sacrifice of her life, upon the death of her husband, is an infallible means of securing to herself everlasting happiness ; and the prevailing opinion among the men of the more civilized parts of Europe, that no reparation for certain insults can be otherwise procured than at the hazard of one's life, is of the same nature."

Judgment is next considered. "Few authors," Dr. Crichton observes, "have treated fully of this faculty; and of those who have done so, not any one whose works have fallen into my hands, has taken it up as a mere object of natural history. They have defined it, and discussed something concerning its properties, in a very metaphysical way; but their definitions are generally faulty and incorrect, and their speculations too refined for the physiologist. Instead of attempting to explain, at present, the nature of judgment, let us confine ourselves to the task of discovering and examining the various classes of ideas, which man, in sound mental health, is capable of comparing with one another. By this means we shall be enabled to find out what the intellectual character is which is common to them all.

"1st. External objects, that is to say, the perceptions they excite, may be compared with each other, as for instance, when a person is desired to say which of any number of men appears to be the strongest, or tallest, or oldest, &c.

"2dly. External bodies, and qualities of bodies, may be compared with certain pre-existing judgments and opinions, as in many matters of knowledge and taste ; for instance, when a person is desired to give his opinion about a piece of architecture, a picture, a landscape, or a horse ; in which case he compares the object before his eyes with the notions he has already acquired concerning the things to which it relates.

"3dly. Abstract qualities and prior judgments may be compared with each other, as, for instance, when Rousseau decides that that which is commonly called civilization, and culture,

culture, do not promote the general happiness of mankind ; and

“ Lastly, The comparison may take place between all those things already mentioned, and the conclusion, therefore, or judgment, has a relationship to the whole of them ; as is the case when a judge has to give an opinion in certain complicated cases of right or wrong, from a multiplicity of dead and living witnesses, and from the relationship which the result of their testimony has with former decisions, and the existing laws ; or when a physician is desired to form an opinion as to the probable event of a dangerous disease, in which case not only all the phenomena present are to be duly weighed, and their causes considered, but these things must also be compared with the knowledge he has acquired concerning the various causes and appearance of death, and with the probable effect which he expects from the means he employs to oppose that event.”

The distinction and analogy between judgment and reason, are treated of in the subsequent pages ; and the following observations are then made, as applicable to the subject of insanity :

“ Between clear and unclouded reason, and absolute insanity, there are many shades of greater or less deviation. To enumerate or point out the distinction which exists between them is impossible. Language is not sufficiently copious and accurate to afford such a mean. The causes of these deviations are numerous ; and the whole subject, therefore, although very important to be known, is of difficult investigation.

“ In regard to the practice of physic, the distinctions which exist between the defect of judgment, or reason, are of much less consequence than their relation to the moral world, or their influence on society ; for judgment, considered as a faculty, has no peculiar disease. The conclusions which a person forms in his mind, may be erroneous,
but

but the faculty of judging is the same in a madman, as in a man in perfect health. One would not say that a musician of Nootka Sound, or the South Sea islands, was less sane than an able and accomplished musician of this country, because he produced different combinations of sound. The muscles in the hands and arms, and the faculty of moving them, may be equally healthy in both. So it is in regard to lunatics, and men who are of sound mind. The faculty of judging is the same in both, but they have different perceptions, and their judgments, therefore, must be different. The madman has diseased nerves and brain, and diseased perceptions, and he is therefore obliged to draw conclusions which appear strange to a man in health. If a madman judges that he has the government of the whole world in his hands, and that the seasons are obedient to his command; that he can dry up the waters of the Ganges by a wish, or thaw the continents of ice which surround the poles; if he believes that he can make the produce of Italy spring up in the deserts of Arabia, or the climate of Arcadia reign in Great Britain, he *judges* in this way, because the perceptions which are present in his mind force him to draw such conclusions. The process of his intellectual faculties in this case, is equally correct as that which caused Sir Isaac Newton to conclude from a number of facts, that all bodies gravitate towards each other; for the intellectual part is the same in both, but the brain is diseased in the lunatic.

“ It is doubtless a true character of insanity when a man’s judgment is under the influence of diseased perceptions, so that he cannot judge as the generality of men do. It would be a very injudicious application of philosophy, were a person in conversation to try to prove that a madman was not mad because he judged correctly about the objects of his thoughts.

“ The defects of judgment do not arise, then, from any fault in the faculty itself, but from the materials on which that faculty has to operate.

“ The deviations which these materials occasion, are of two kinds : 1st. Incorrect judgment. 2dly. Erroneous judgments.

“ Incorrect judgments may arise,

“ A. From a want of sufficient facts or materials.

“ B. From a too hasty examination of one or any number of them.

“ C. From not *recollecting* all the chain of analogies, or the different links of relation, by which the various parts of evidence, or facts, are connected with the general conclusion.

“ D. From the interference of matters of belief, prepossessions, prejudices, or passions.” N. N.

(To be concluded next month.)

MEDICAL REPORTS AND CORRESPONDENCE.

Art. 1. *A Communication concerning the Eruptions resembling the Small-pox, which sometimes appear in the inoculated Vaccine Disease.* By GEORGE PEARSON, M. D. F. R. S. &c. Physician to St George's Hospital, &c.

FOR reasons, the explanation of which would lead into too long a detail, and which indeed cannot be given with perfect propriety in this sheet, I feel myself compelled to publish a few observations concerning the eruptions which appear, in some instances, in the cow-pock by inoculation.

Although the new inoculation in the present year has been, I think, sufficiently extensive to manifest the advantages of it over that for the small-pox ; so that it is not likely to be ever disused ; yet, the unexpected appearance of eruptions has inclined many persons to be of opinion that no beneficial consequences can be produced by this practice ; or at least that such consequences, at best, seem to be problematical. It may be useful to observe, that some of
the

the advocates for the cow-pock inoculation contend, that eruptions are never produced by it; accordingly they assert, that in these eruptive cases the disorder was not the cow-pock, but the small-pox; the variolous poison having either been inserted inadvertently, or the constitution having been affected by it casually. To justify what is advanced, it is incumbent on the assertors either to prove that such errors have been committed, or at least they ought to be able to oppose equally extensive experience to that of the adverse party. For no sound reasoner will consider opinions which are only founded on conjecture to be demonstrated truths. I will not however take upon myself the unrequired task of attempting to vindicate others from the above charges; but I shall only perform a duty in stating the result of my own experience with regard to the point in question; conceiving that by this means the truth may be brought to light if aided by evidence from the experience of future inquirers.

In the course of my practice, the latter end of last February and in March following, I distinctly recollect four cases, in which I first saw eruptions from the vaccine inoculation, resembling so much those of the small-pox, that I should not have hesitated to consider them as belonging to this disease if I had not excited them by a different poison from the variculous. I observed, however, at that time, some appearances of these eruptions, different from those which usually occur in the small-pox. Almost all these eruptions, in the stage of desiccation, afforded shining, smooth, black, or reddish brown scabs; very few of them having previously suppurated. Finding in two other instances that the matter from the inoculated pustule of these patients produced a similar eruptive disorder, and also the same being the event in the practice of two or three of my correspondents, whom I had furnished with matter from the above eruptive cases, I from that time used matter only from the cases in which no eruptions appeared. After this precaution no eruptive cases re-

sembling

sembling the small-pox, occurred ; but certainly eruptions in number from a single one to about a dozen, which were large, red, hard pimples, with little or no lymph, and never with any pus, occurred, in, probably, one case out of twenty or thirty. These eruptions, so unlike the small-pox, produced no trouble, and were of such a short duration, that when I speak of eruptions I do not include them in the account ; for I refer to this account those cases only in which the eruptions resembled the small-pox. Nor do I reckon among the eruptive cases, those in which now and then a rash broke out about the fourteenth day after inoculation, and which was as troublesome as the *Urticaria*. My experience then, with respect to the cases of eruptions being diminished in number by avoiding inoculation with matter of similar eruptive cases, coincides with Dr. Woodville's, and confirms what he has already so usefully communicated to the public. It was obvious to suspect on the first occurrence of the eruptive cases, that various matter, in an unobserved way, but from sources which could not even be conjectured, had been introduced into the constitution instead of the vaccine poison. This conjecture, in spite of the clearest evidence of sense respecting the nature of the matter used, received some countenance from the non-appearance of eruptions as above stated ; but from the occurrence of such cases in the practice of other Inoculators in the last autumn, and this winter, I think it is very unreasonable to doubt any longer that, either on account of peculiar states of the human animal economy, or on account of some co-operating agents, the genuine vaccine poison does sometimes produce a certain variety of the cow-pock, characterized by the appearance of pustules like those of the variola. I have good evidence also to shew, that even in the hands of those very Inoculators, who a little time ago would not allow that the vaccine poison could produce eruptions, such cases have lately occurred. In the month of October last I inoculated a child two years of age with the vaccine

poison.

poison. The aboriginal matter which had produced this matter I took from the cow in March last, since which the vaccine disease had been excited by it, in my hands, in a great number of patients. The vaccine disease took place with the usual appearances in the inoculated part, and affected the whole constitution in the ordinary manner; but a few eruptions broke out on the second or third day after the usual slight fever; they were, however, only the red large pimples mentioned above, not at all like the small-pox. Mr. Keate carried matter from this child to Brighthelmstone, where Mr. Barrett inoculated two children, who took the disease; and from one of these Mr. Keate inoculated three children. They all had the usual fever about the eighth day, and all had a number of variolous like eruptions except one, who had only five or six, and those dried on the fifth day. This last case was probably that which Mr. Keate informed me had, in the inoculated part, the genuine vaccine pustule; but in all the others Mr. Barrett observed, that in the inoculated part the pustule was ragged at the edges and flat, most resembling the variolous pustule. Matter from these patients was sent to Petworth, where Mr. Andre informs me he inoculated with it fourteen children. They all took the disease, and had eruptions like the variolous. Three children at the breast had from three to twelve pustules; the remaining eleven children had from fifty to several hundred eruptions. The state of the arms, and the characters of the pustules of the inoculated part, are not mentioned. None of the above patients died; nor is any mention made by Mr. Keate, Mr. Barrett, or Mr. Andre, even of any apprehension of danger. I add, that about a month ago, Dr. Thornton sent me a case with variolous like eruptions produced by matter which I originally took from the cow. According, then, to experience we draw these conclusions:

1. That in certain constitutions, or under the circumstances of certain co-operating agents, the vaccine poison produces

produces a disease resembling the small-pox, and of course the pustule in the inoculated part is very different from that of the vaccine-pock ordinarily occurring; and the eruptions resemble very much, if not exactly, some varieties of the small-pox.

2. That in some instances these eruptions have occurred, although the inoculated part exhibited the genuine vaccine pustule.

3. That the matter of such eruptive cases, whether taken from the inoculated part, or from other parts, produces universally, or at least generally, similar eruptive cases; and has not, I believe, been seen to go back, by passing through different constitutions, to the state in which it produces what may be called the genuine vaccine disease.

4. That eruptions of a different appearance from variolous ones frequently occur in the true cow-pox.

Now whether the vaccine poison, when it produces these cases resembling the small-pox, really becomes by composition or decomposition variolous matter, is undetermined. If this should be found to be the case by future experiments, still we must consider the two poisons as of distinctly different species, on account of the different characters of the pustule in the small-pox and cow-pock: although, as just said, by the combination of some other substance with the cow-pock poison, or by the separation of some one of the constituent ingredients of the poison, the variolous may be produced. To illustrate this theory, let it be considered that magnesia and sulphate of magnesia are different species of substances, although they agree in some of their principal effects on the human constitution, and in other properties; but by the union of magnesia with sulphuric acid, it becomes sulphate of magnesia. Or the illustration may be given conversely. As then we have distinct denominations for these two substances, so we ought to have them for the two poisons, and the two differ-

ent diseased states they produce ; namely, the cow-pock and the small-pox. Accordingly, Dr. Odier of Geneva, whose powers as a Dialectician, and whose acuteness as a Philologer, I can attest from the period of his academical studies, has “baptized” (to use the language of Dr. De Carro) the new disease *la vaccine* or *vaccina* ; rejecting the absurd name of the English, *variola vaccinae* *.

But to return to the immediate question under discussion : —granting that the eruptions are liable to be produced by the inoculation of the cow-pock, what difference ought this accident to make in our estimate of the value of the new practice, from the estimate made on the supposition that no such eruptions would occur ? I apprehend the value is hereby depreciated, but not to such a degree as to create any reasonable apprehensions of the failure of the vaccine inoculation in superseding and extinguishing the small-pox ; because,

1. If the precaution be taken of avoiding inoculation with matter from eruptive cases, as far as I have seen, not above one case with variolous-like eruptions will be produced among two hundred instances of inoculated cow-pock.

2. These eruptive cases are, as far as I have observed, not more severe than the ordinary kinds of inoculated small-pox.

3. I have seen no disfiguration of the skin from this variety of cow-pock. But I think it just to acknowledge, that, from the experience I have had, no Practitioner can answer for such cases not occurring in any instance ; and as danger is always in proportion to the number of eruptions, which number no person can pretend to limit, it is evident that the chance of life during this disease is hereby lessened, although but a very little. Provided this statement be made to the patient, it does not appear to me, that the fact

* Some French writers have named this disease the small-pox of cows, *la petite-vérole des vaches*. EDITORS.

of the liability to eruptions ought to impede the progress of the vaccine inoculation; but if, on the contrary, the patient be assured that such eruptions will not occur, there is good ground for the practice falling into discredit; or, at least, for many persons, with reason, being discontented. After this representation of an unfavourable part of the history of the cow-pock, it is consolatory to be able to counterpoise it by some new facts which, like that of the eruptions, have been discovered in the course of further experience. It now appears that a person who has had the small-pox is not susceptible of the cow-pock by inoculation*; nor is a person susceptible of the constitutional affection from the cow-pock poison more than once. On the whole, then, we have gained, perhaps, as much as we have lost since the publication of the original account. And unless some new adverse facts shall be discovered, and confiding that the public will adopt a practice which is so manifestly to their interest, the change hereby effected in medical practice will be so eminently memorable, that *the introduction of the vaccine inoculation must become an epoch in the history of physic.*

Art. 2. *On the Utility of the Tinctura Cantharidis in Tooth-ach.* By Mr. KÆNSER, at Nautgardt.

MR. Kænsen, surgeon at Nautgardt, has lately employed a strong tincture of cantharides with great success in alleviating the tooth-ach. He directs it to be made by steeping half an ounce of the Spanish flies in a pint of rectified

* The cases of milkers who have chopt hands, being repeatedly affected with sores from the cow-pox poison in the casual way, although they had already suffered the vaccine disease constitutionally, or had undergone the small-pox; probably occasioned the error of the conclusion here alluded to.

spirit. A piece of cotton dipped in the tincture is to be applied frequently on the gum surrounding the affected tooth, until it raise a blister; and if the tooth be carious, a piece of cotton dipped in the tincture is to be put into the hollow part. E.

Art. 3. *Medical Lectures in the Spring, 1800.*

THE different courses of lectures on medicine, surgery, midwifery, chemistry, botany, &c. (of which we gave a full account in September,) will re-commence towards the latter end of January 1800. In addition to those already mentioned, we learn that Dr. BRADLEY gives lectures on the *practice of physic*, and Mr. AIKIN on *chemistry*. Y.

Art. 4. *Notices of intended Publications.*

1. “THE Art of maintaining feeble Life, and of prolonging it in incurable Diseases.” Translated from the original German of CHRISTIAN AUGUSTUS STRUVE, M. D. By WILLIAM JOHNSTON. 8vo.

2. “A System of the Elements of Chemistry,” the production of Mr. ROBERT HEARN, will be speedily published by Messrs. Longman and Rees, Paternoster Row.

3. The eighth volume of Dr. SIMMONS’S “Medical Facts and Observations” has lately been committed to the press, and will be published by J. Callow, Crown Court, Great Windmill Street.

4. Dr. GILLESPIE is said to be printing a work, relating to the Diseases of Seamen, &c.

5. Dr. JOHN REID, of London, is preparing a work for the press upon insanity.

6. Speedily will be published, in two octavo volumes, illustrated by engravings, “Systematical Principles of modern

dern Chemistry; explaining, in a concise Manner, the whole of this Science, according to the Antiphlogistic Doctrine, upon the Ground of many valuable Experiments: and shewing its practical Uses in the several Arts, Manufactures, and the Occurrences of common Life." By Dr. FRED. CHARLES GREN, late Professor at Halle, in Saxony. Translated from the German, with notes and necessary tables.

7. "An experimental Disquisition concerning the Art of preparing Bread; being the Substance of a Paper read before the Physical Society of Guy's Hospital," will be published in a few weeks, by a MEDICAL PRACTITIONER of Uxbridge.

8. Mr. REECE, of Chepstow, Member of the Corporation of Surgeons in London, and late domestic Surgeon and Apothecary to the General Infirmary at Hereford, purposes shortly to publish "A Pharmacopœia for the Use of Hospitals, Workhouses, &c. &c."

9. Proposals have been circulated by the Rev. Dr. HOMER, of Oxford, for printing, in two quarto volumes, a work to be entitled, "*Bibliotheca Universalis Americana*; or, an Universal American Library: containing a general Catalogue of Publications, relating to America and the West Indies, from the first Discovery of those Countries by Columbus in 1492, to the End of the present Century." This work will include, among other matters, the completest list of books concerning medicine, surgery, and natural history (so far as they relate to America,) that has hitherto been attempted.

10. In the course of the ensuing winter will be published, by Dr. NISBET, of Edinburgh, Part III. of the "Clinical Guide, containing Midwifery and Obstetrical Pharmacy; or, a concise View of the leading Facts on the History, Nature, and Treatment of the various Diseases that form the Subject of Midwifery, or attend the Pregnant, Parturient,

rient, and Puerperal State. Illustrated with a Set of Copper-plates. Intended as a Memorandum Book for Practitioners. To which will be added, an Obstetrical Pharmacopœia, divided into three Parts, viz. Materia Medica, Classification, and Extemporaneous Prescription."

II. Dr. GIRTANNER's Treatise on the Lues Venerea, translated from the third German edition, and illustrated with notes by Mr. BLAIR, is said to be in the press. W.

* * * We are constrained, for want of room, to omit our Monthly Catalogue of new Books on Medicine, Surgery, and Natural History.

Art. 5. *Current Price of Drugs in the London Market.*

			£.	s.	d.		£.	s.	d.	
ALMONDS, bitter	—	—	from	3	15	0	to	4	0	0 cwt.
— sweet	—	—	—	5	0	0	—	5	5	0 —
— Jourdan, new	—	—	—	15	0	0	—	0	0	0 —
— Valentia, best	—	—	—	6	0	0	—	6	15	0 —
Aloes, Barbadoes	—	—	—	10	0	0	—	11	0	0 —
— hepatic	—	—	—	14	0	0	—	0	0	0 —
— Cape	—	—	—	3	12	0	—	0	0	0 —
— Soccot.	—	—	—	16	0	0	—	18	0	0 —
Alum, roach	—	—	—	uncertain						
— English	—	—	—	22	0	0	—	23	0	0 T.
Ammoniacum, in lump	—	—	—	10	0	0	—	16	0	0 cwt.
— in drops	—	—	—	22	0	0	—	0	0	0 —
Angelica root	—	—	—	4	5	0	—	4	10	0 —
Antimony, crude	—	—	—	2	2	0	—	0	0	0 —
Aqua fortis	—	—	single	0	1	1	dot.	0	1	10 lb.
Arsenic, yellow	—	—	from	3	0	0	to	3	2	0 cwt.
— white	—	—	—	3	0	0	—	3	2	0 —
— red	—	—	—	uncertain						
Assafoetida	—	—	—	6	0	0	—	15	0	0 —
Balsamum Copaivæ	—	—	—	0	3	9	—	0	6	0 lb.
— Peruvianum	—	—	—	0	7	6	—	0	8	0 —
— Tolutanum	—	—	—	0	3	6	—	0	0	0 —
Barilla, Spanish	—	—	—	uncertain						
— Teneriffe	—	—	—	2	2	0	—	2	4	0 cwt.
Bark, common Peruvian	—	—	—	0	4	0	—	0	0	0 lb.
— red	—	—	—	0	3	3	—	0	4	0 —
— second	—	—	—	0	6	0	—	0	0	0 —
— quill, or best	—	—	—	0	12	0	—	0	0	0 —
— yellow	—	—	L. —	0	3	3	—	0	4	6 —
Barley, English pearl	—	—	—	1	3	0	—	0	0	0 cwt.
— foreign ditto	—	—	—	1	8	0	—	0	0	0 —
Benzoë	—	—	—	uncertain						
Borax, refined, East India	—	—	—	12	0	0	—	14	0	0 —
— unrefined	—	—	—	6	6	0	—	0	0	0 —
— English	—	—	—	0	2	8	—	0	2	9 lb.
Camphire, refined	—	—	—	0	13	0	—	0	0	0 —

Camphire,

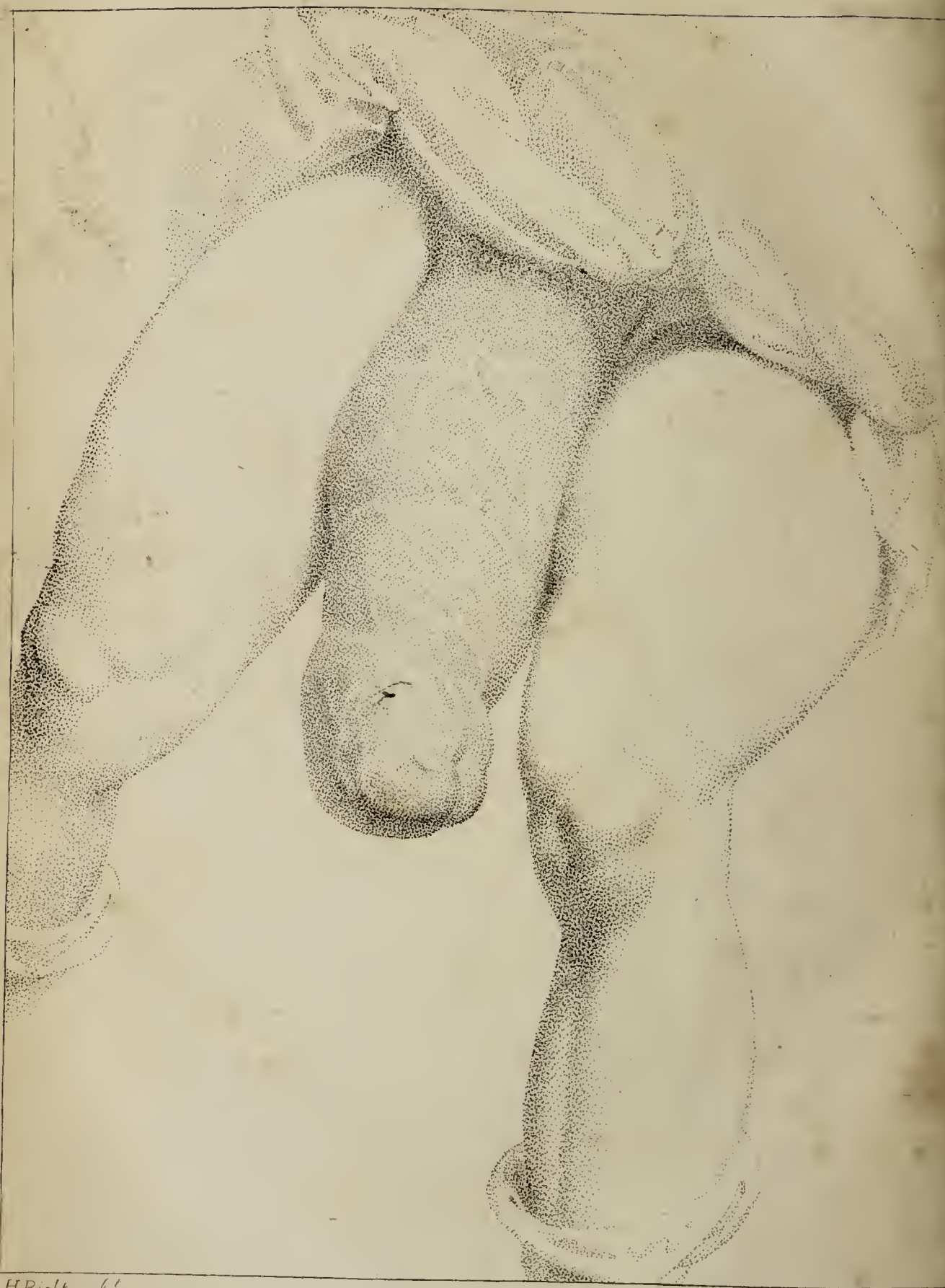
			£.	s.	d.		£.	s.	d.	
Camphire, unrefined	—	from	57	0	0	to	0	0	0	cwt.
Cantharides	—	L.	0	9	0	—	0	9	6	lb.
Cardamoms, best	—	—	0	17	0	—	0	0	0	—
Carraway seeds, foreign	—	H.	2	2	0	—	2	4	0	cwt.
— English	—	—	2	6	0	—	2	10	0	—
Cassia buds	—	—	15	0	0	—	16	10	0	—
— fistula	—	—	3	0	0	—	3	3	0	—
— ligna	—	—	14	0	0	—	16	0	0	—
Castor, American	—	—	0	6	0	—	0	8	0	lb.
— oil	—	—	0	4	6	—	0	4	8	buks
— Russia	—	—	uncertain							
Cerusa acetata	—	—	0	2	0	—	0	2	2	lb.
Cinnamon	—	—	uncertain							
— bonded	—	—	0	4	2	—	0	4	3	lb.
Cloves	—	L.	0	6	2	—	0	6	4	—
— bonded	—	L.	0	3	2	—	0	0	0	—
Cochineal, East India	—	—	0	6	0	—	0	10	0	—
— Spanish, garbled	—	L.	1	1	0	—	1	3	0	—
Colocynth, Turkey	—	—	0	4	6	—	0	4	9	—
Colombo root	—	—	25	0	0	—	0	0	0	cwt.
Coriander seeds, English	—	—	1	0	0	—	1	4	0	—
Cream of tartar	—	—	5	0	0	—	5	5	0	—
Cumin seeds	—	—	2	0	0	—	2	8	0	—
Fœnugreek seeds	—	—	1	7	0	—	0	0	0	—
Galbanum	—	—	16	0	0	—	18	0	0	—
Galls, best Aleppo	—	—	7	10	0	—	8	0	0	—
— mixed	—	—	6	10	0	—	7	0	0	—
Gamboge	—	—	16	0	0	—	30	0	0	—
Gentian root	—	—	3	7	0	—	3	10	0	—
Ginger, Jamaica, black	—	L.	2	0	0	—	2	5	0	—
— white	—	L.	2	10	0	—	4	0	0	—
— Barbadoes	—	H.	3	15	0	—	4	0	0	—
— East India	—	—	uncertain							
Ginseng root	—	L.	uncertain							
Guaiacum	—	—	uncertain							
Gum Senegalense, ungarb.	—	—	uncertain							
— garb.	—	—	uncertain							
— Arabic, East India	—	—	8	0	0	—	14	0	0	—
— Turkey, fine	—	—	26	0	0	—	27	0	0	—
Ipecacuanha root	—	L.	0	13	6	—	0	0	0	lb.
Isinglass, leaf	—	—	0	6	0	—	0	6	6	—
— book	—	—	0	5	0	—	0	0	0	—
— long staple	—	—	0	6	9	—	0	7	6	—
— short staple	—	—	0	6	0	—	0	8	0	—
Jalap	—	L.	0	3	9	—	0	0	0	—
Juniper berries, German	—	—	1	2	0	—	1	4	0	cwt.
— Italian	—	—	1	2	0	—	1	3	0	—
Lac, shell	—	—	8	0	0	—	13	0	0	—
— stick	—	—	uncertain							
Linseed	—	H.	2	4	0	—	2	12	0	Q.
Liquorice, Italian	—	—	7	5	0	—	7	7	0	cwt.
— Spanish	—	—	6	0	0	—	6	10	0	—
Mace, long	—	—	1	6	0	—	1	7	0	lb.
— bonded	—	—	1	1	6	—	1	2	6	—
Madder root, best	—	—	4	4	0	—	6	0	0	cwt.
Manna in flakes	—	—	0	3	9	—	0	4	3	lb.
— sort	—	—	0	1	2	—	0	1	6	—
— Tolpha	—	—	0	2	0	—	0	2	2	—
Mastic	—	—	0	3	6	—	0	4	0	—
Musk, China	—	—	1	7	0	—	1	10	0	oz.

Mustard,

			£.	s.	d.		£.	s.	d.	
Mustard, white	—	L. from	0	6	0	to	0	12	6	lb.
— brown	—	—	0	10	0	—	0	17	0	lb.
Myrrh	—	—	10	0	0	—	20	0	0	cwt.
Nitre, rough	—	—	uncertain							
— refined	—	—	5	5	0	—	5	10	0	—
Nutmegs, sound	—	—	0	13	0	—	1	1	0	lb.
— bonded	—	—	0	14	0	—	0	14	6	—
Nux vomica	—	—	7	10	0	—	8	0	0	cwt.
Oil, Lucca, or salad	—	—	11	0	0	—	0	0	0	jar.
— Spanish	—	—	70	0	0	—	72	0	0	ton.
— linseed, English	—	H. —	52	0	0	—	0	0	0	—
— palm	—	—	none							
Olibanum	—	—	4	10	0	—	6	6	0	cwt.
Opium, Turkey	—	L. —	0	16	0	—	0	0	0	lb.
— East India	—	—	0	8	0	—	0	0	0	—
Opoponax	—	—	40	0	0	—	42	0	0	cwt.
Pepper, white	—	—	0	1	5½	—	0	1	6	lb.
— short, long	—	—	10	0	0	—	10	10	0	cwt.
Pimento	—	—	0	0	9¼	—	0	0	9½	lb.
Quicksilver	—	L. —	0	3	9	—	0	0	0	—
Resin, English black	—	—	0	12	0	—	0	14	0	cwt.
— yellow	—	—	0	14	0	—	0	15	0	—
— foreign black	—	—	0	8	0	—	0	0	0	—
— yellow	—	—	0	12	0	—	0	0	0	—
Rhubarb, East India	—	—	0	7	6	—	0	9	6	lb.
— Russia	—	—	0	13	0	—	0	14	0	—
Saffron, Spanish	—	—	1	19	0	—	0	0	0	—
— French	—	—	1	14	0	—	0	0	0	—
Sago	—	—	4	0	0	—	0	0	0	cwt.
Sal ammoniac	—	—	10	0	0	—	10	10	0	—
Salop	—	—	19	0	0	—	21	0	0	—
Sandarac	—	—	4	10	0	—	5	5	0	—
Sarsaparilla	—	—	0	5	0	—	0	5	6	lb.
Sassafras	—	—	2	8	0	—	2	10	0	cwt.
Scammony, Aleppo	—	—	1	4	0	—	1	6	0	lb.
— Smyrna	—	—	uncertain							
Senna	—	—	0	4	9	—	0	5	6	—
Snake root	—	—	0	4	6	—	0	0	0	—
Soap, Castile	—	—	6	0	0	—	6	10	0	cwt.
Spermaceti, refined	—	—	0	2	4	—	0	2	6	lb.
Sulphur, foreign, rough	—	—	22	0	0	—	0	0	0	ton.
Tamarinds, West India	—	—	5	0	0	—	5	10	0	cwt.
Tapioca, Lisbon	—	—	0	1	0	—	0	1	2	lb.
Tragacantha	—	—	16	0	0	—	0	0	0	cwt.
Turmeric, Bengal	—	—	3	15	0	—	0	0	0	—
— China	—	—	5	0	0	—	0	0	0	—
Turpentine, American	—	—	0	18	0	—	0	0	0	—
— oil of, English	—	—	3	5	0	—	0	0	0	—
Verdigrise, wet	—	—	0	1	6	—	0	1	9	lb.
— dry	—	H. —	0	2	6	—	0	2	9	—
Vermillion, town-made	—	—	0	5	0	—	0	5	4	lb.
Vitriol, Roman	—	—	3	12	0	—	3	15	0	cwt.
— oil of	—	—	0	0	5	—	0	0	0	lb.
Wax, Dantzic	—	—	uncertain							
— Hambro', white	—	L. —	0	2	5	—	0	2	7	lb.
— bees, English	—	—	9	10	0	—	0	0	0	cwt.
— American	—	—	8	5	0	—	8	10	0	—

*** The letter H. denotes that the price is getting higher, and L. the contrary.

D.



H. Richter f.

THE
LONDON MEDICAL REVIEW
AND
MAGAZINE.

VOL. II. N° XI.—JANUARY MDCCC.

ACCOUNT OF NEW PUBLICATIONS.

ART. I. *The Naturalist's and Traveller's Companion.* By JOHN COAKLEY LETTSOM, M.D. The third Edition. Octavo. pp. 215. DILLY, London. 1799. Price 4s.

“MANY gentlemen and sea-faring persons who go abroad, by their office and situation in life, enjoy both time and opportunity for collecting the best information on subjects of general utility, especially the natural productions peculiar to the place they visit or reside in, which they are induced to overlook, for want of proper directions for distinguishing and preserving them, whereby things of value and use are lost to the public, and the time of the traveller less beneficially employed.

“To promote an application of the time and talents of such persons to rational and commendable inquiries of this kind, is the design of the following directions, which the author thinks himself justified in recommending, as they principally result from experiment and observation: these were first printed in the year 1772, and the reception from

the public was such as to encourage a second edition in 1774; but this likewise being soon out of print, a third edition was not long afterwards prepared for the press, and some of the first sections were printed off several years ago; various avocations then intervening, prevented the completion of the remaining sections; nor would this little performance have been now resumed, had any publication appeared calculated to preclude the utility of the original plan, which has since been considerably improved, to make it more deserving of future encouragement."

The present work appears to us well calculated to answer the design of Dr. Lettsom, and is, undoubtedly, the best publication of its kind now extant. In order to give our readers some idea of the plan of this volume, we subjoin its general contents:

"Method of catching and preserving Insects for Collections—Method of preserving Birds and other Animals—Directions for bringing over Seeds and Plants from distant Countries—Method of analyzing mineral Waters—Of the Contents of the Air—Directions for collecting and distinguishing fossil Substances, including Salts, Earths, Metals, and Inflammables—Observations and Queries respecting Learning, Antiquities, religious Rites, polite Arts, &c.—Commerce, Manufactures, Arts, Trade, &c.—Meteorological Observations, Food, Way of Living, Animal Economy in general, &c.—Zoology—Botany—Mineralogy—Directions for taking off Impressions of Casts from Medals and Coins."

Y.

ART. II. *The Anatomy of the Gravid Uterus, with practical Inferences relative to Pregnancy and Labour.* By JOHN BURNS, Surgeon in Glasgow. Octavo. pp. 248. MUNDSELL, Edinburgh. 1799. Price 6s.

MR. BURNS has rendered an essential service to professional men in the execution of this work; which, with the

anatomical description of the uterus by the late celebrated Dr. Wm. Hunter, forms a complete system of the anatomy of that viscus, and lays a sure foundation for the obstetric art. The author delivers every circumstance relating to the structure of the uterus and its appendages in the various stages of pregnancy; and has dispersed, in several parts, much judicious physiological reasoning. Throughout the whole he has been particularly attentive to whatever could, in the least, throw light upon the art of midwifery. The reader will likewise find many important remarks on the pathology of this organ, and its contents, during utero-gestation.

Æ.

ART. III. *Traité de la Gonorrhée et des Maladies des Voies urinaires, avec un Recueil d'Observations analogues.* Troisième Edition. Par F. TEYTAUD, Chirurgien à Paris. Octavo: pp. 366. 1798.

WE were in hopes, upon observing that this work had undergone three editions, to have been enabled to present our readers with some interesting hints on this subject; but after a careful perusal of its contents, we are obliged to state that it contains only a number of common-place observations, fanciful distinctions, and nothing worthy of remark in the plan of cure. In his preface, the author considers the origin of the venereal disease, which he thinks will never be ascertained. The work is then premised by an anatomical and physiological description of the sexual organs of man, accompanied by three engravings, in aquatinta, explanatory of the parts of generation and the nature of strictures in the urethra. The body of the volume is divided into seven chapters:—the first treats of gonorrhœa in men, its species and cure: the second, of obstinate and long-standing gonorrhœas, and their mode of

cure : in the third is delivered the treatment of inflammation of the testicle arising from gonorrhœa : the gonorrhœa of women and its complications form the subject of the fourth : the fifth is on venereal stranguries and their treatment : urinary abscesses from strictures and fistulous ulcers are considered in the sixth : and the seventh delivers the various operations performed on the urinary passages ; with different receipts for bougies, injections, and other remedies, in which enter several useless ingredients. The remaining part is occupied by thirty-four cases, most of which were successfully treated by the author. G.

ART. IV. *Observations on the diseased and contracted Urinary Bladder, and frequent painful Micturition ; with some Cautions respecting the Use of the caustic Bougie in the Treatment of Strictures in the Urethra. To which are added, Observations on the scirrhus-contracted Rectum, from the second Volume of Memoirs of the Medical Society of London.* By JOHN SHERWEN, M.D. Member of the Corporation of Surgeons. Octavo. pp. 56. JOHNSON, London. 1799. Price 1s. 6d.

THE disease of the bladder here treated of is said to resemble the scirrhus rectum in some of its features. “ Like that, it produces a frequent and often fruitless stimulus to expulsion. It is also slow, but not equally slow, in its progress ; and is to the full as dreadful in its consequences, and as fatal in its termination. Although, like the *scirrhus rectum*, it do not admit of being cured, it will sometimes admit of palliation ; and is equally an object worthy of the most serious attention from every humane practitioner.

“ The incontinence of urine,” says the author, “ or frequent micturition incidental to old age, may be considered as a simple and chronical form of the disease ; but there is another

another much more acute, though equally simple in its nature ; I mean, the sympathetic irritation arising from the use and application of *cantharides*: this, however, is so well known, and, in general, so easily removed, that it does not merit our attention at present ; nor would it have been mentioned here but for the sake of those patients who have already a tendency to disease in these parts. There can be no doubt but a blister, applied for any other purpose to a patient under these circumstances, must be very apt to accelerate mischief both in the bladder and urethra.

“ When the contracted bladder is not the consequence of age but disease, it is generally the effect of previous inflammation from whatever cause arising ; and I have long been convinced that gout is a much more frequent source of this inflammation than will perhaps be generally admitted. Repeated attacks of inflammation from this or any other cause thicken the coats of the bladder, and proportionably contract its cavity. The *rectum* sympathizing with the bladder partakes of the same inflammation ; adhesions come on betwixt these two *viscera*, which, together with a preternatural accumulation of cellular substance, gradually forms a large diseased mass, which, by its weight pressing on the *os sacrum*, sometimes impedes the descent of *fæces*, producing symptoms resembling those of the true *scirrhus rectum*.

“ When this diseased mass of cellular substance thus presses upon and partially obstructs the *rectum*, the necessary opiate medicines, administered for alleviating the painful sensations in the bladder and *urethra*, are very apt to hasten the progress and fatal termination of the disease. Difficulty in procuring an intestinal discharge is soon followed by hiccup and stercoraceous vomiting, which increase the general debility of the system, and are rarely conquered, though not speedily fatal. I have known these symptoms continue day after day, while the pulse and the countenance and the temperature of the skin, as in the true *scirrhus rectum*, gave evi-

dent signs that death, however ardently desired, was still at a distance.

“ Since these symptoms, but more especially the hiccup, originate partly in a mechanical cause, it is in vain to harass the patient with large doses of musk, oil of cinnamon, æther, or any other medicine, administered with a view to quiet spasm; calomel and such purgative medicines as the stomach will retain, with the occasional application of cold water to the abdomen, are alone useful; and these are again soon counteracted by the exhibition of opium, for which the afflicted patient will naturally call.

“ Although the contracted bladder may thus accidentally produce some of the symptoms common to the *scirrhus rectum*, no attentive practitioner can ever be under any great difficulty in distinguishing the two diseases. But the case is very different with respect to the *stone*, which excites every appearance common to the diseased and contracted bladder. So much are the symptoms of these two morbid affections blended, that I believe the diseased and contracted bladder never fails to excite for a great length of time, the strongest suspicions of stone; which nothing but the actual introduction of the finger *per anum*, or of the *catheter* into the cavity of the bladder, by one or more careful and experienced surgeons, can remove.

“ The frequent painful micturition arising from this affection has been often ascribed to an ulcer at the neck of the bladder, or in some part of its cavity; and it must be acknowledged that the puriform mucous discharge gives some countenance to the opinion. But I believe it is now very generally known that the internal surface of the bladder, like that of the membrane of the lungs under the stimulus of inflammation, both acute and chronic, will afford a secretion so strongly resembling the discharge consequent upon ulceration, as frequently to deceive the best eye and the soundest judgment.”

The author next points out the mode of distinguishing this disorder from a stricture in the urethra. "At first," says he, "it may be thought that the introduction of a bougie might decidedly ascertain this point; but, unfortunately for our prognostic, the diseased and contracted bladder is often accompanied by spasmodic strictures in the *urethra*. I have seen, for instance, a small bougie in vain attempted to be introduced, and return twisted into the form of a cork-screw, when a warm catheter of the full size has, with a little patience and gentle perseverance, entered the bladder, without giving much pain. It is also a very curious fact, that the contracted bladder and the real stricture of the *urethra* mutually produce each other. The former particularly, when labouring under disease, excites a frequent stimulus to expulsion, which irritates the passage, at first exciting spasmodic and sympathetic constriction, terminating after length of time in induration and permanent substantial stricture. On the contrary, when this is the primary disease, it excites obstruction to the passage of urine and *semen*, and thus often occasions difficulty and irritation, with frequent inclination to the discharge of urine; the consequence of which is, that the bladder, being often irritated to expel its contents, gradually contracts in its size, and, being often subjected to painful efforts, thickens in its coats; and hence it becomes a source of much ambiguity to ascertain the primary disease; which, however, is an object of the utmost importance, both to the welfare of the patient, and the reputation of the surgeon.

"As I have already said, the contracted and inflamed bladder is capable of producing sympathetic contraction and obstruction in the *urēthra*, so a real stricture in that canal has a similar effect on the bladder. Stricture in the *urethra* is always accompanied by frequent micturition: in process of time the bladder contracts, from the want of dilatation; and, I believe, most experienced surgeons will recollect, that

suppressions of urine from this cause much more frequently occur while the stricture is of a recent than of a chronic date. The membrane of the *urethra* and the internal surface of the bladder are at first much more susceptible of sympathetic irritation than at a later period, when they have undergone many attacks of inflammation, and become, in a manner, callous. A person labouring under a stricture of two or three years duration will be liable to suppression of urine upon every accidental cold or irregularity ; he will go through the whole painful and inconvenient process of warm bath, bougie, catheter, &c. and, after a suppression of several hours, will at last discharge three or four pints of urine. But, after the disease has got into a settled state, the bladder will be contracted to a very small size ; and, if suppression should now take place, which, however, the patient will not be equally liable to undergo, painful and dangerous symptoms will come on with a very small accumulation of urine.

“ The caution, which I wish to communicate, and which I feel myself particularly and irresistibly called upon to do, is this, that they will ever keep in mind the distinction betwixt a stoppage of urine arising from a stricture of a recent or chronic date ; because, in one, the capacity of the bladder may be so large as to admit the whole length of the catheter or bougie to pass without injury ; but, in the other, it is very possible, that, from the time the point of the instrument has passed the fourth part of an inch beyond the neck of the bladder, it may be stopped by a thickened fold ; or, if it pass one inch or one inch and a half farther, it may push against the *fundus* ; whilst the unwary practitioner may suppose, if he advert only to the length of bougie or of catheter introduced, that he has not passed beyond the prostate.”

Dr. Sherwen here takes occasion to recommend the application of the caustic ; a bold practice introduced by our forefathers in the sixteenth century, but which has not been much employed until its late revival by Mr. J. Hunter.

Perhaps

Perhaps the wary practitioner will feel the less inclined to have recourse to this severe method of treatment, from the following considerations:—"The use of the caustic bougie has not become so general as it merits, and as it soon will; and I sincerely hope these cautions may be published in time to guard the unwary against similar mistakes in the introduction of that instrument. Let us, for a moment, suppose a bold and persevering surgeon to discover a real stricture of long standing in any part of the *urethra*. He makes way through this obstruction by means of the caustic bougie, and, in due time, passes a common bougie into the bladder; but, not adverting to the contracted, thickened, and diseased state of that *viscus*, the point of his bougie meets with a second obstruction from a wrinkled fold, or the *fundus* of the bladder, an inch or an inch and a half sooner than he believes he can possibly have gone beyond the *cervix*. The consequence will be, that he will suppose he has found a second stricture, which is a very common occurrence, and will not hesitate to apply his caustic bougie to the internal surface of the bladder, by which he must inevitably excite intolerable pain, with incessant and ineffectual strainings towards micturition, and expose the life of his patient to the most imminent danger, to no manner of purpose; perhaps, after he has given him the strongest assurances of a safe, speedy, and effectual cure. There is no admeasurement of the length of the *urethra* from the extremity of the glans to the neck of the bladder that can be depended on for preventing a mistake of this kind, because an horripilation of half a minute is capable of making an alteration of two inches or more in the length even of an *urethra* already flaccid. The best mode of proceeding then must be, whenever the armed bougie is to pass within the verge of the *sphincter ani*, to accompany it with the finger in the *rectum*, which will, if necessary, distinctly trace its progress, till it touches and is lost in the prostate gland."

A proposal is then made, which the author considers "as
an

an improvement in the method of applying the caustic ;” but we apprehend it requires the sanction of larger experience than that of Dr. Sherwen, to introduce such an innovation.

“ By macerating a longer or shorter time in hot water, a bougie or urethral probe made of polished whalebone will acquire any degree of softness and pliability that may be required ; and, as I have already observed in my treatise on the *scirrhus rectum*, will adapt itself to the natural curvature of the passage without being ever liable to break ; and, since it contains no wax nor unctuous ingredient, must be much less liable to stimulate the *urethra* than the common bougies,” [This we very much doubt.] “ and cannot easily be impaired in its properties. The extremity of such a bougie is to be of the common thickness, and the point should have a small depression, to the bottom of which a little adhesive plaster, or any other viscous substance, may be applied ; after which, let it be lightly touched with a thin coat of powdered lunar caustic, which will be *perfectly secure* ;” [We cannot think so.] “ and the operator will thus have it in his power at any time to convey the precise quantity which he wishes to apply at once, from a quarter of a grain to a grain, without the smallest danger of a larger being disengaged.”

This method is recommended with the particular view of preventing “ the possibility of a piece of caustic being forced out of the end of a bougie by the spasmodic action of the urethra,” (in the common mode of introducing the caustic,) which the author observes, “ is sufficient to excite horror and alarm in the mind both of patient and surgeon.” Now, we cannot avoid expressing our belief that a solid piece of caustic properly embedded in a plaster bougie is more secure, and less liable to touch the sides of the urethra, than pulverized caustic lightly attached to a viscous substance : we therefore conjecture that this method will be cautiously imitated by surgeons whose practice affords them frequent opportunities of treating the contracted urethra.

Upon the whole, Dr. Sherwen appears to be a novice in the

the treatment he advises; and to have undertaken “the cure of strictures in the urethra, as it were, by accident,” rather than as a part of his ordinary employment in the profession.

The remarks which he offers on the *scirrhus-contracted rectum* having been laid before the public twelve years ago, need not be here repeated. The means recommended for its cure, as well as those for the diseased bladder, are merely palliative, and such as most practitioners are acquainted with.

T. T.

ART. V. DR. WILSON on Febrile Diseases.

(Concluded from page 375.)

IN our last number we finished with the author's observations respecting the exhibition of bark in intermittents: we now proceed to lay before our readers the analysis of his doctrine of continued fever, which, for the sake of perspicuity, has been divided into the synocha and typhus.

The first chapter treats of *the Symptoms of continued Fever—of the Symptoms of Synocha—of the Symptoms of Typhus—of the State of the animal, vital, and natural Functions, in the Progress of Typhus—and of the Prognosis in continued Fever.*

The second chapter embraces the *remote Causes of continued Fever:—Cold—Contagion—the Ways in which Typhus spreads—and the Means of preventing the Generation and checking the Progress of Typhus*, are treated of at considerable length, and are particularly deserving of attention.

In the third chapter, *of the proximate Cause of Fever*, the author delivers the *Cullenian hypothesis*; and explains with great minuteness the *Brunonian doctrine*, on which he bestows many encomiums. This chapter appears also to contain several important observations, by the author, on this his favourite system. The following are his *Facts relating to the Laws of the Excitability of the animal System in a State*

State of Health and Disease, which were read about six years ago before the Royal Medical Society of Edinburgh :

“ I. *Excitability* is that quality of the living solid which distinguishes living from dead matter.

“ Dr. Brown maintained, that there is no cause which partially affects the excitability of a living system ; but facts have been adduced to prove this opinion erroneous.

“ II. *Excitement* is a state of activity.

“ By excitement is not necessarily implied contraction ; because the term is not confined to the muscular system ; the nervous system, however, cannot be excited without occasioning a corresponding change in the muscular. I do not adopt Dr. Brown's definition of excitement, that it is the effect of agents on the living solid ; because they often produce a state very different from excitement, atony.

“ III. *Atony* is a state of inactivity, that is, of debility, in which every part of the system is preternaturally sensible to the action of some agents, and preternaturally insensible to that of others ; and watchfulness is the consequence.

“ IV. *Agent* is any thing capable of occasioning a change in the state of the living solid.

“ In the Brunonian doctrine it is supposed, that every agent produces excitement, that is, a stimulus. The term agent is therefore rejected by Dr. Brown, and that of stimulus used in its stead. But it appears from the foregoing observations on that system, that the effects of agents on the living solid are either excitement or atony, according to the degree in which the agents are applied. When an agent occasions excitement, it is a stimulus ; when it occasions atony, it must have some other appellation expressive of this effect.

“ V. Agents are either *stimuli* or *atonics*.

“ VI. *Stimuli* are those agents which produce excitement. (II.)

“ VII. *Excitement* is either *moderate* or *excessive*.

“ VIII.

“ VIII. *Moderate excitement* is that which is followed by *exhaustion*.

“ IX. *Exhaustion* is a state of inactivity, that is, of debility, in which those parts of the system, on which the animal functions depend, become uniformly less sensible to the action of all agents ; and sleep, that is, a suspension of the animal functions, is the consequence.

“ This state is always the effect, and the degree of it is proportioned to that of the preceding excitement.

“ This is the only state, either healthy or morbid, to which Dr. Brown's definition of indirect debility will at all apply ; and here it applies only to those organs on which the animal functions depend ; for those on which the vital and natural functions depend are never in a state of exhaustion.

“ During sleep these organs suffer no diminution of vigour, but what is the consequence of the suspension of the animal functions. This is another distinction of importance which Dr. Brown overlooks.

“ The state of the heart and blood-vessels after each systole is not that of exhaustion, as exhaustion is defined by Dr. Brown, nor does he indeed suppose it to be so. That it is not a state of exhaustion might be demonstrated in various ways. It is sufficient, however, to observe, that the exhausted excitability can never be restored while the stimulus which exhausted it continues to act. A man will never recover from the fatigue of a long walk while he continues walking ; nor will the retina ever recover its sensibility while exposed to the same degree of light which impaired it. But the contractions of the heart continue to recur, although it is exposed to the uninterrupted action of the agent which excites them ; for, as I have frequently observed in frogs, if a ligature be thrown round the aorta so that the heart continues uniformly gorged with blood, its fibres are still alternately contracted and relaxed, and for

the space of four or five minutes with the same frequency as before the ligature was applied. Thus, if we sprinkle salt on a muscle, we do not produce permanent contraction followed by exhaustion, but alternate relaxations and contractions followed by exhaustion. But the state of the muscle in the relaxation which intervenes between the contractions, is essentially different from its condition in that relaxation which succeeds them, because, in the former case, the same agent, although its application has not been interrupted, is still capable of exciting the muscle to action.

“ The vital and natural functions are the powers of assimilation, by which the excitability of those parts of the system which suffer exhaustion is renewed. If these powers also suffer exhaustion, to what powers in the animal machine shall we attribute the renewal of their excitability? It is impossible that any exertion of these powers themselves can renew it; because every thing capable of exciting their action must increase the exhaustion, that is, still further diminish the excitability*. Besides, it is impossible that the excitability of the parts on which the vital and natural functions depend, could be renewed while the same agents which occasion its exhaustion continue to be applied. If the organs on which the vital and natural functions depend were subject to the same exhaustion with those concerned in the animal functions, no animal could exist above a few hours.

* “ It is this objection to the Brunonian system which forced its author into the supposition, that a quantity of excitability, which is to last through life, is bestowed on every animal at the commencement of its existence. In forming his system he could not but perceive, that admitting every part of the body to be in a state of exhaustion, there is no power inherent in it capable of restoring its excitability. This formidable objection he found it necessary to get rid of, although at the expense of introducing into his system the most palpable inconsistencies.”

“ The

“ The excitability of the organs on which the animal functions depend, is renewed during sleep, because the stimuli which occasioned the exhaustion are withdrawn; and the powers of assimilation, that is, the powers of life, remain. But if the natural stimuli occasioned exhaustion in the organs on which these powers depend, as the stimuli are never withdrawn, would not their uninterrupted application, *à fortiori*, prevent any renewal of the excitability, which they had been the only means of impairing?

“ In diseased states, indeed, the organs on which the vital and natural functions depend are often debilitated. But this debility we shall find to be of a nature so different from exhaustion, that excitement, instead of increasing, is the only means of removing it.

“ By the addition of stimuli, we may rouse to action the organs on which the animal functions depend, while they are in a state of exhaustion. A powerful affection of the mind, for example, will excite these organs while under the influence of fatigue, but it will leave them in a state of still greater exhaustion. What Dr. Brown says of the action of stimuli in removing this state is wholly unfounded; the excitability of those parts of the system on which the animal functions depend, the only parts subject to exhaustion, is most speedily and effectually restored during the total absence of every stimulus capable of affecting them. It may be assumed as an axiom, that that debility which can be removed by the operation of stimuli, is not exhaustion.

“ X. *Excessive excitement* (VII.) is that which is followed by atony. (III.)

“ If we except cases of local disease, *atony* and its effects are the only species of debility to which those organs, on which the vital and natural functions depend, are subject. And to these, they are subject in common with the other living solids, those on which the animal functions depend.

“ In

“ In exhaustion, (IX.) there is but *one set of organs* debilitated; those concerned in the animal functions; and these are rendered uniformly less sensible to the operation of all agents, till at length they cease to be excited; and sleep is the consequence.

“ In atony (III.) *every part of the system* is debilitated, and becomes preternaturally sensible to the action of some agents, namely, the natural agents, food, caloric, exercise, &c. (XI.) which in this state of the system, instead of acting as stimuli are atonics; and preternaturally insensible to that of others, namely, those which still act as stimuli, termed by Dr. Brown diffusible or artificial; and watchfulness is the consequence.

“ XI. *Atonics* are those agents (V.) which produce atony.

“ XII. The system in general is either in a state of *health* or *disease*. Predisposition to general disease is a state that cannot be defined.

“ XIII. *Health* is either a state of moderate excitement, (VIII.) or exhaustion. (IX.)

“ XIV. *General disease* is either a state of excessive excitement, (X.) or atony. (III.)

“ XV. Atony is to be removed by inducing moderate excitement.

“ As in atony all the natural agents, food, caloric, exercise, &c. are atonics, we are obliged to have recourse to stimuli, which in the healthy state occasion excessive excitement, but in the atonic are the only means by which we can induce moderate excitement. In proportion as we succeed in maintaining this degree of excitement, we relieve the morbid state; and in proportion as this happens, the laws of excitability are changed to those which prevail in health; the natural stimuli begin to produce excitement, and we find it necessary to diminish the quantity of the artificial, till by degrees the healthy laws of excitability are restored, and the artificial stimuli laid aside.

“ XVI.

“ XVI. Excessive excitement is to be removed by changing excessive into moderate excitement.

“ As excessive excitement in general disease is occasioned by the presence of the natural agents, the only means we have of diminishing the excitement are, diminishing the quantity of some of these, namely, of caloric, of the blood, and other fluids; and entirely preventing the application of others, food, noise, light, exercise, &c.

“ In atony, where our object is to increase excitement, we employ stimuli; but in excessive excitement, where our object is to diminish excitement, we do not employ atonics, because the state which they induce is always a morbid one.

“ XVII. General disease includes infinite varieties, from the greatest excess of excitement, to the extreme of debility.

“ XVIII. Simple fever is the only general disease; and may be defined an excessive excitement or debility of all the functions, without any local affection.

“ XIX. All other diseases are either local, or general and local.

“ The only diseases which can be mistaken for simple general diseases, are affections of the heart and brain. A local affection of the brain is known by the presence of delirium, coma, or convulsions; a local affection of the heart, by the presence of palpitation or syncope. When these symptoms occur in fever, the case is complicated; it is a case of general and local disease combined; and the preceding observations will not apply to it.

“ XX. The laws of excitability are changed in fever. This change is sufficient to account for the phenomena essential to fever, without supposing any change induced on the fluids.

“ XXI. The proximate cause of fever, therefore, is a change in the laws of excitability; in consequence of which the same agents no longer produce the same effects.

“ How the remote causes of fever act in inducing this change, and on what change in the living solid this change in the laws of excitability depends, we neither can, nor ever shall, perhaps, be able to determine. This part of the subject is involved in the utmost obscurity. From the facts which have been stated, it is certain that the causes of fever do effect this change, and it is evident that such a change in the living solid must occasion the phenomena of fever.

“ XXII. In simple fever, then, there are only two indications of cure; the one to moderate excitement, the other to remove atony. (XV. XVI.)”

The fourth and last chapter contains *the Treatment of continued Fever—of the Means of stopping a Fever at its Commencement, by inducing a Crisis*. A fever seldom terminates spontaneously by a crisis, after the tenth or twelfth day; and a crisis is rarely induced after the third. The means considered here are, sweating, the use of cold and warm water, vomiting and purging, venesection and blisters, each of which is considered at some length. When we *fail to induce a crisis at the commencement*, there are two indications in continued fever, viz. in the synocha to change excessive into moderate excitement, and in typhus to change atony into moderate excitement.

“ *Of the Treatment of Synocha.*—The indication of cure in synocha, it has just been observed, is to change the state of excessive into that of moderate excitement; which is effected by avoiding the application of some of the natural agents, and diminishing the quantity applied, or stimulating power of others. Such is the simple outline of the treatment in synocha, and the principle on which our practice in all idiopathic fevers, where the symptoms of synocha prevail, is conducted.

“ The natural agents which are to be wholly removed in exquisitely formed synocha, and the total removal of which

is more or less necessary according as the symptoms are more or less violent, are,

“ 1. All exercise either of body or mind.

“ 2. Every thing which makes an impression on the external senses.

“ 3. All kinds of aliment, and the presence of feculent or other matter in the alimentary canal.”

Having explained fully each of these heads, the author proceeds to the most important part of the treatment, namely, blood-letting; in the consideration of which he points out the various circumstances by which the judgment of the practitioner is to be guided, and offers several judicious remarks on the degree of excitement which warrants this operation. Some observations are next submitted on the appearances of the blood drawn, in order to determine the propriety of repeating it. Dr. Wilson then observes, “ It appears from what was said of the *modus operandi* of blood-letting, that it is the more effectual, the more suddenly the blood is abstracted. On this account it was once the practice to let blood from both arms at the same time. It is enough, however, to make the orifice pretty large, a circumstance not always sufficiently attended to by surgeons.

“ For the same reason that we abstract the blood suddenly, namely, that the action of the powers supporting circulation may be diminished with as little loss of blood as possible; some have recommended, in those cases where much is to be feared from a considerable loss of blood, to keep the patient more or less in the erect posture during the blood-letting, in order to induce a degree of syncope by a small loss of blood. This, in idiopathic fevers, is not to be attempted. In certain circumstances, hereafter to be pointed out, I have known it practised in the phlegmasiæ with success, but it requires much caution and discernment to practise it with safety.

“ In general, the horizontal posture is preferred, that we

may not be prevented by a tendency to syncope from taking away the proper quantity of blood. In this posture many can bear the loss of sixteen or eighteen ounces with ease, who could not in the erect posture lose half the quantity without falling into syncope. Every cause which diminishes the flow of blood to the brain tends to induce, and every cause that increases it to prevent, syncope. It is in this way that the horizontal posture, by which the flow of blood towards the brain is increased, and its return rendered less rapid, is serviceable in blood-letting.

“ In general blood-letting, that is, when our only view in letting blood is to relieve a state of general excitement, it is of no consequence from what part of the body the blood is taken. The most convenient place therefore, the arm, is generally chosen. But when there is present any local affection which may be relieved by blood-letting, by abstracting the blood from the part affected or its neighbourhood, the same operation may answer the purpose both of general and local blood-letting. Thus when delirium or coma supervene in synocha, it is better to take the blood from the jugular vein, if this can be readily made to swell, than from the arm. The following caution is to be attended to in bleeding from the jugular, in affections of the head ; to compress that vein alone from which the blood is about to be taken. A ligature thrown round the neck in such cases, though not very tight, may be attended with dangerous consequences.

“ There is, perhaps, no case which warrants our carrying blood-letting so far as many of the ancients recommend. Copious and early blood-letting, Hoffman observes, is in no fever more requisite than in the synocha. But we are not to follow the advice of some of the ancients, of letting the blood flow till the patient faints ; it is better to repeat the operation than to take away too much at once.

“ It is generally regarded as an undoubted maxim in the treatment

treatment of fevers, that we are not to let blood, give cathartics, or in any manner disturb the system by medicines, when an eruption, or any other of those symptoms which are esteemed critical, makes its appearance. A question of some consequence, says Hasenohrl, may be considered here, whether it is proper to let blood in fevers when an eruption appears upon the skin. Every one believes, he adds, that we are not by any efforts of art, such as blood-letting, catharsis, vomiting, sweating, to disturb the operations of nature, when there is reason to expect a crisis. He justly observes, however, of this maxim, that ‘*juxta illud vulgare nulla regula sine exceptione*,’ and gives the case of pleurisy as an exception to it. He might have added, not only all cases of visceral inflammation, but those also where an eruption, or other critical symptom, appears in the synocha without relieving the symptoms.

“ When the state of the symptoms requires both blood-letting and the exhibition of an emetic, the blood-letting should always precede the emetic. One thing, Sydenham observes, is not to be overlooked; if the condition of the sick be such as to require both vomiting and blood-letting, let the blood-letting precede the emetic; for I could mention several cases, he continues, in which the efforts of vomiting produced such a flow of blood to the head, that a rupture of some of the vessels of the encephalon, and a fatal apoplexy, were the consequence.

“ A similar observation applies to blistering, when it is judged necessary at the same time with blood-letting. The blister should be delayed till after the blood-letting, because its irritation will be less hurtful when the excitement has been diminished.

“ Such are the circumstances to be attended to in the employment of blood-letting in synocha.

“ Evacuations, however, are not the only means of diminishing the quantity of blood. The quantity of this

fluid depends on that of the ingesta; and it may be so diminished by abstinence as in a short time to endanger life.

“ When the excitement runs very high we recommend both evacuations and abstinence; but when it becomes more moderate, or in cases where it has never been considerable, we recommend neither. It is then sufficient to employ those means which diminish the stimulating power of the blood and ingesta; these I am now to point out.

“ The last means of fulfilling the indication in synocha are those which diminish the stimulating power of such of the natural agents as cannot be wholly removed. These are, caloric, the circulating fluids, and, if the synocha be of considerable duration, food.

“ We have no means of diminishing the stimulating power of caloric; it is only to the circulating fluids, therefore, and food, that this indication applies.

“ As the quantity of blood cannot be much diminished without debilitating every function of the system, it is of consequence, where the symptoms run high, to lessen as much as we can its stimulating power, that the excitement may be diminished with as little evacuation as possible.

“ The means of diminishing the stimulating power of the blood are,

“ 1. Dilution; and,

“ 2. The medicines which have been termed refrigerant.

“ II. *Of the Treatment of Typhus.*—The indication in typhus, it has been observed, is to change the state of atony into that of moderate excitement; which is to be effected,

“ 1. By removing, as far as can be done with safety, the natural agents which now act as atonics; and,

“ 2. By applying those agents which still act as stimuli.

“ The agents which have been employed most successfully

fully for the latter purpose are, opium, wine, the bark, and the external use of cold water.

“ These are the principal stimuli,” the author observes, “ employed in typhus; many others have been celebrated as powerful remedies in this complaint, but they are much less used now than formerly.

“ It is not many years since it was a common practice to employ blisters as a stimulus in this fever, and many of the older practitioners still employ them with this view. It is now very generally admitted, however, that their stimulating effect is trifling, and never, perhaps, compensates for the irritation and trouble they occasion.

“ The serpentaria, cascarilla, and colomba, have long been celebrated medicines in typhus. These seem to act in a manner similar to the bark. Like it, their stimulating effect is chiefly exerted on the nervous system. They are occasionally useful; but in modern practice, at least in this country, they have been nearly superseded by the more powerful remedies, bark and wine. When, however, the bark cannot be taken in any form without oppressing the stomach, some of these often prove an useful addition to the wine.

“ A new stimulus has lately been introduced into the treatment of typhus by West India practitioners, the capsicum; and from the trials which have been made with it, there is reason to believe that it will prove a valuable medicine. Dr. Wright, in his report respecting the yellow fever of the West Indies, in the second volume of *Annals of Medicine*, observes, ‘ We did not however despair; we
‘ gave capsicum pills with the most marked success, and
‘ even where melæna or the black vomit had taken place,
‘ the capsicum has snatched the patient from the most
‘ imminent danger.’ Others have made similar observations. The benefit derived from the capsicum in the *cy-nanche maligna* suggested its exhibition in typhus, and

affords as strong an argument in favour of the practice as analogy can supply.

“ There is a class of medicines, whose stimulus seems particularly calculated to remove that state of debility which is attended with spontaneous contractions of the muscles of voluntary motion, occasioning subsultus tendinum; and other involuntary motions of the trunk and limbs; the most powerful of these medicines are ether, opium, musk, camphire, castor, and ammonia. All of these have been regarded as powerful medicines in typhus.

“ Camphire, in small doses, often has a very considerable effect in overcoming restlessness and anxiety, and does not interfere with the exhibition of more powerful medicines. The *Mistura camphorata* is often a good vehicle for the bark in typhus.

“ Camphire combined with opium forms, perhaps, the most powerful medicine we possess in obstinate vomiting, which sometimes occurs in this fever, and both on account of its debilitating effects, and because it prevents the exhibition of medicines, is always an alarming symptom.

“ Dr. Lysons gave large doses of camphire with nitre at the commencement of fevers; and when, with the assistance of a little white-wine whey, it succeeded in bringing out a sweat, it seemed frequently the means of cutting short the disease.

“ The ammonia and musk have been chiefly recommended when the low delirium, characteristic of typhus, has supervened, and in such cases they often afford relief, but their effects are transitory; and now that we are acquainted with the proper mode of exhibiting the bark and wine in typhus, all this class of medicines, with the exception of opium, are every day going more and more into disuse.

“ If we contemplate the change which has been taking place in the treatment of fevers for the last fifty years, we shall

shall find that physicians have been gradually diminishing the number of their medicines, and increasing the doses of those they retained, till the treatment of this set of diseases, from being complicated and feeble, has become simple and efficacious.

“ It may be useful to present at one view, the treatment of continued fever, when we fail to induce a crisis at its commencement.

“ I. The indication in synocha is to change excessive into moderate excitement. This is to be effected by avoiding the application of some of the natural agents, and by diminishing the quantity or stimulating property of others.

“ The natural agents to be avoided in synocha are, 1. All exercise, either of body or mind. 2. Every thing which makes an impression on the external senses. 3. All kinds of aliment, and the presence of feculent or other matter in the alimentary canal.

“ The natural agents, the quantity of which is to be diminished in synocha, are, 1. Caloric. 2. The circulating fluids.—The quantity of caloric is to be diminished by cool air, cold drink, and the external use of cold and tepid water. The quantity of the circulating fluids is to be diminished by venesection and abstinence.

“ The natural agents whose stimulating power is to be diminished in synocha are, 1. Food, if any be judged proper. 2. The circulating fluids. The means of diminishing the stimulating power of these agents are, 1. Dilution. 2. Refrigerants.

“ II. The indication in typhus is to change atony into moderate excitement. This is to be effected,

“ I. By avoiding, as far as can be done with safety, the application of the natural agents which now act as atonics. The natural agents to be avoided in typhus are, 1. All exercise, either of body or mind. 2. Every thing which makes an impression on the external senses.

“ The

“ The natural agents, the quantity of which is to be diminished in typhus, are, 1. Caloric. 2. Food.

“ The natural agents, the quantity of which is not to be diminished in typhus, are, The circulating fluids.

“ II. By applying those agents which still act as stimuli. The chief of these are, wine, opium, the bark, and the external use of cold water.” B. A. B.

ART. VI. *Traité des Maladies des Femmes enceintes, des Femmes en Couche, et des Enfants nouveau-nés, précédé du Mécanisme des Accouchemens.* Rédigé sur les Leçons d'ANTOINE PETIT, Médecin de Paris, Démonstrateur et Professeur au Jardin des Plantes, et Membre de plusieurs Académies, &c. et publié par Baignières, ancien Médecin de Paris et de Montpellier, &c. et Perral, ancien Chirurgien-major des Armées et de l'Arsenal de Paris. 2 Vols. Octavo. Paris. An VII.

THE above work is professedly composed from the lectures of Dr. Antoine Petit, whose character as an accoucheur entitles him to a more than ordinary degree of attention; but the number of treatises now extant on this subject will be a sufficient reason for our declining to particularise its contents. A very extensive performance of this nature is announced in the following article. V.

ART. VII. *Des Maladies des Femmes.* Par N. CHAMBRON, M.D. &c. Second Edition. Octavo. Paris. An VII.

THIS valuable publication, comprised in eight volumes, treats of the diseases which are incident to the female sex, in the different stages and conditions of life. The learned author has entered minutely and judiciously into the consideration

sideration of the various complaints of children in a separate work, of which we subjoin the title. V.

ART. VIII. *Des Maladies des Enfants.* Par N. CHAMBON, M.D. &c. Two Volumes. Octavo. pp. 920. Paris. An VII. V.

ART. IX. *Observations on the Diseases of Seamen.* By GILBERT BLANE, M.D. F.R.S.S. Lond. & Edin. Physician Extraordinary to the Prince and Princess of Wales, Physician to the Duke of Clarence, and one of the Commissioners of Sick and Wounded Seamen. The third Edition, with Corrections and Additions. Octavo. pp. 626. MURRAY and HIGHLEY, London. 1799. Price 8s.

THE author having been appointed physician to the British fleet, under Lord Rodney, in 1780, set an example worthy of imitation, by devoting his talents and opportunities to the means of bettering the condition of our seamen. His object has been the prevention, as much as the cure, of diseases; and the great assistance he received from the different surgeons in the fleet, toward the execution of his design, is here acknowledged with marks of approbation. In the preface, as well as in the body of the work before us, are several important remarks not contained in the former editions; especially, we feel it our duty to notice two additional articles, on ulcers and on casualties, besides a valuable supplement on the yellow fever, quarantine, lazarettoes, &c.

Dr. Blane premises a few suggestions concerning the principles that have guided him in making his inquiries on this subject, which we seriously recommend to the attention of

of junior practitioners. It well behoves those who engage in so important, and yet ambiguous, a profession as that of medicine, to examine strictly into the laws of evidence, and the rules of investigation; lest they be deceived by plausible, but delusive, appearances on one hand, or run into the opposite extreme of fastidious incredulity. "Practical skill in every art," the author observes, "consists in adapting means to ends, and must therefore be founded on the knowledge of the energies of natural agents as they reciprocally affect each other; and it is the business of observation and experience to ascertain and select the facts constituting this knowledge*.

"In those inquiries which have inanimate matter for their subject, a single fact may be a sufficient ground for an observation; but in those which relate to the living body, there are several circumstances which give occasion to ambiguity, and render the discovery of practical truths more difficult.

"The first I shall mention is, that there are resources in nature whereby diseases are subdued without any interposition of art, as is evident with regard to wounds, and even acute diseases, not only in animals, but in the human species, and that therefore the operations of nature and of art come to be so blended, that it is difficult to distinguish them so as to ascertain what is due to each. It is well observed by some medical writer, that the animal frame differs from all other machines in this, that when out of order it can rectify itself. This holds with regard to prevention as well as cure; for infection, not excepting that of the plague, will frequently disappear spontaneously. It is not meant by this to detract from the efficacy or utility of the art of physic; for allowing it to be true in its full

* "See this farther elucidated at page 39 of a *Lecture on Muscular Motion*, read before the Royal Society of London the 13th and 20th of Nov. 1788, by Gilbert Blane, M. D."

extent, it still becomes a question, in the eye of reason, how to regulate nature, with regard to her external agents, such as heat, cold, and diet; and it becomes the business of art to interpret her intentions with regard to them. And when we reflect that the diseases and casualties of the human species are multiplied and aggravated by the artificial modes of life dependant on our reason, it is presumable that these must be opposed by artificial means of relief suggested also by reason. But it is not merely presumable, but certain, as a matter of fact, that most diseases are more or less under the control of art; and one could be named which, being absolutely irresistible by the powers of nature, would go far towards the extinction of our species, were it not resistible by the powers of medicine.

“ The next peculiar source of difficulty alluded to, consists in the diversity of the constitution of individuals, depending on natural *stamina*, and other circumstances, such as age, sex, and habits of life, in consequence of which it becomes necessary to vary practice in the same disease by a nice exercise of discriminative judgment, and to be cautious in drawing general conclusions from single facts.

“ The third circumstance of this kind which I shall mention is, that the living human body, while it is acted upon by all the causes which affect inanimate matter, is also subject not only to those affections which are incident to animal nature in general, but to those depending on the operations and passions of the mind connected with rationality. It is evident; that where a cause is simple there is little difficulty in ascertaining it, and applying it to a practical purpose; but when an effect is the result of many causes, as is here the case, it becomes impossible to embrace and calculate them all, so as either to predict or command any event depending on their joint action, without the utmost risk of error; and this is so much the case with
regard

regard to diseases, that it seems most advisable to lay aside, in a great measure, the consideration of internal and latent causes derived from refined speculations, and to be guided in practice by a few obvious principles, and by the sensible effects produced by external agents, whose powers are ascertained by observation and experience.

“ Fourthly, The great obscurity of the causes of most diseases, and the difficulty of investigating the principles of the animal economy. It may be safely affirmed, that these are still so imperfectly known, as to admit of little practical application. The theoretical doctrines of physic have generally no better foundation than hypothesis, and have taken their colour from the prevailing philosophy of the times. The principles of mechanics, hydraulics, and chemistry, have at different periods been so plausibly applied to explain the functions of life, and the operations of medicines, as to gain the general assent of the times. Though juster views of the animal economy have caused these pretty universally to be exploded in this age, yet the experience of past errors has not prevented our contemporaries from yielding to the fascinating novelty of a new branch of philosophy, called the PNEUMATIC CHEMISTRY. This has been so successfully cultivated of late, as to do honour to the present age, by its important discoveries in the habitudes of several species of inanimate matter. Nor can it be denied, that it has been ingeniously applied to explain some of the *phænomena* of life; but this must necessarily be partial and limited, in as much as life is regulated by laws of its own; and in so far as relates to practical inferences, the application of the new chemistry seems equally fanciful, puerile, and fallacious, as that of the mechanical and chemical principles of the older schools.

“ Theoretical inquiries into animal nature, have, in our times indeed, been conducted by some authors upon principles of greater philosophical precision, by considering it as
subject

subject to laws peculiar to itself. But it yet remains to be proved, what substantial practical advantage has resulted from these speculations.

“ The reason why physiology has not been applied with more success to practice, is not only because the greater part of the reasonings are hypothetical, and therefore uncertain and fallacious, but because it is necessary for this end, that this sort of knowledge should be perfect in every branch of the animal economy. It is not enough that we can ascertain one or more points; for there are so many bearings, and mutual dependencies in the functions of the human frame, that if we are to act upon our knowledge of them *a priori*, a perfect knowledge of them all is necessary, with a view to any efficient practical purpose, as they may all have more or less share in any given effect intended to be produced. To neglect the consideration of any one of them, in the measures to be adopted, would prove a source of error, similar to the omission of one of the elements in a calculation, and would in like manner produce an erroneous result. The circulation of the blood, which is one of the few discoveries in the animal economy, that has been incontrovertibly established, has not been of so much practical utility as might be supposed; the reason of which is evident from the foregoing considerations; for it is not the mere mechanism of our frame that determines its operations, but also the energies depending on sensibility, irritability, and the affections and operations of the mind.

“ If theory could be rendered perfect, there can be no doubt of its utility, in as much as our knowledge of nature extends our power over nature. But it is highly improbable that in a system so dark and complicated as the living human frame, it will ever arrive at this perfection; and from its present crude state, and from the eagerness of the human mind to pry into causes, and to make a hasty application of science to practice, what is called physiology and

pathology are extremely liable to abuse; and this abuse has been one of the principal means of corrupting practical medicine and retarding its progress. It is but fair, however, to acknowledge that studies of this kind have their use, for, in common with natural knowledge in general, they serve to enlighten the mind by banishing superstition and credulity; and though practical truths can rarely be deduced from them, yet theory, even though false, tends to suggest new remedies and methods of cure, and to confirm or vary those which are already in use; in this way ministering to experience, without the sanction of which these suggestions are deserving of no regard*. It is remarkable that Boerhaave, upon fanciful principles, discovered several useful facts.

“As we have so little to expect, therefore, from theory, and as it has appeared that animal life is influenced by so many circumstances affecting the result of experiments, and giving rise to contingent events, a great number of facts, duly varied and compared, must be necessary, in order to produce those legitimate deductions properly constituting *observations*. An observation is, as it were, a general fact, deduced from the average of a number of individual facts; and in the art of physic most observations are the results of inductions more elaborate and difficult than, perhaps, in any other branch of art or science. In order to attain them, there is required not only patient attention to collect, and memory to retain, but that rapid intuitive glance of the mind called sagacity, to compare and discriminate them in the moment of application. This faculty is a sort of higher instinct, instituting an instantaneous and tacit

* “See this question treated fully and accurately, and in the most impartial and dispassionate manner, by Cornelius Celsus (an author who lived in the time of Tiberius Cæsar), in his Preface, a composition which can never be enough admired for its good sense as well as elegance.”

calculation; and it is by attempting an imitation of this process of the mind, that I have endeavoured to frame the method of investigation pursued in this work.

“ The last impediment I shall mention, to the progress of medical truth, is the great difficulty of appreciating testimony. We have not only to guard against our own credulity and self-deception, but those of others. In consequence of medical practitioners not accurately distinguishing between the operations of nature and of art, drawing inferences from individual cases, and being biassed by favourite theories, not to mention the allurements of vanity and self-interest, which it is to be hoped seldom influence the regular members of the profession, it is a melancholy truth, that there is, perhaps, no branch of human knowledge in which there is so great a want of correctness with regard to recorded facts.

“ The whole subject of medical investigation and evidence, being of the utmost consequence, would require a more full discussion; but it has here already exceeded the usual bounds of a preliminary discourse. Enough, however, has been said to convince every person of a correct judgment, how difficult it is to ascertain truths, and to draw fair and solid inferences, on medical subjects.

“ Upon the whole, I have, in the following work, humbly attempted to follow what I conceive to be the only true method of cultivating practical medicine, that is, to collect and compare a great number of facts. A few individual cases are not to be relied on as a foundation of general reasoning, the deductions from them being inconclusive and fallacious, and they are liable to be turned and glossed, according as the mind of the observer may be biassed by a favourite prepossession or hypothesis. It has been my study to exhibit a rigid transcript of truth and nature upon a large scale, and to take the average of numberless particular facts, to serve as a groundwork for observation;

servation; and I have endeavoured to analyse and collate these facts, by throwing the monthly returns that were made to me into the form of tables, as the most certain and compendious way for finding their general result."

The method followed in this work is, "*first*, to deliver the history of the different voyages and expeditions, so far as relates to health, giving an account of the prevalence and nature of the diseases and mortality on board of ships and in hospitals: *secondly*, to deduce, from observations founded on these facts, and also from the former experience of others, the causes of sickness in fleets, and the means of prevention: *thirdly*, to deliver some practical observations on the cure of the most common diseases and casualties incident to a sea life."

As the first impression of this volume made its appearance in the year 1785, we presume that the generality of medical gentlemen in the navy are already acquainted with its valuable contents; it will therefore only be necessary to point out some of the additional observations comprehended in the present edition.

Z. T.

(To be concluded next month.)

ART. X. *The Arguments in favour of an inflammatory Diathesis in Hydrophobia considered; with some Reflections on the Nature and Treatment of this Disease.* By RICHARD PEARSON, M. D. Physician to the General Hospital near Birmingham, and Member of the London College of Physicians. Octavo. pp. 59. SEELEY, London. 1798. Price 1s. 6d.

IN consequence of Dr. Ferriar of Manchester (whose valuable writings are well known to the medical world) having revived the doctrine of an inflammatory diathesis in hydrophobia, Dr. Pearson was induced to publish this little tract, in which the arguments adduced in its favour are attempted

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to be refuted. The doctrine is founded, in his opinion,
“ 1. Upon certain symptoms which attend this disease.
2. Upon analogy, or the occurrence of similar symptoms in some other diseases of a known inflammatory nature.
3. Upon the appearances on dissection. And, 4. Upon the successful employment of venesection in some supposed cases of rabies.”

Under each of these heads Dr. Pearson considers the circumstances which gave rise to the opinion; he then proceeds to demonstrate their fallacy, and finally draws this inference,—“ *that the disease produced by the bite of a mad dog, or other rabid animal, does not belong to the class phlegmasiæ; in other words, that it is not an inflammatory disease.*”

The pamphlet concludes with some judicious practical reflections, which we shall lay before our readers.

“ After the failure of blood-letting, the warm bath, and the rest of what is termed the *antiphlogistic method*, the transition was natural to the *tonic plan*. Dr. Rush, however, seems to have been led to this, not so much by a consideration of the unsuccessful employment of the remedies above mentioned, as by a fancied analogy between tetanus and rabies.

“ In tetanus from wounds, fractures, amputations, and cold after exposure to heat, there is no poison acting upon the system; the muscles are affected with spasms, and are not alternately convulsed and relaxed, as in hydrophobia; and in the former disorder there is none of that preternatural sensibility, none of that intolerance of fluids, when applied to the surface of the body, nor any of that irritability of mind, which we observe in rabies canina. I do not see much analogy between them.

“ But, although the symptoms are unlike, it does not necessarily follow that the same, or nearly the same treatment may not be applicable to both. I am inclined to think that one of the remedies recommended by Dr. Rush

may be given with good effect in cases of hydrophobia ; I mean wine : and the more so, as we find from Dr. Russell's account that wine in large quantities has been administered with success against the bite of a venomous serpent, between which disorder and rabies there is in several respects a much greater affinity than between rabies and tetanus.

“ As for the other remedy proposed by Dr. Rush, viz. the cold bath, experience is against it. In one of Dr. Vaughan's patients it had a full trial, as well as in a patient who died at the Birmingham Hospital some years ago. The application of water, hot or cold, seldom fails to excite convulsions, and only serves to aggravate the disease. It is time that bathing, which has been so generally and so unsuccessfully employed in hydrophobia from the days of Celsus to the present moment, should be laid aside.

“ I hope the confidence which most practitioners have in mercury, as a cure for rabies, is not misplaced. The progress of this disease, after its unequivocal symptoms have appeared, is generally so rapid, that there is not sufficient time for mercury to take effect ; and I wish I could not add, that in some well-authenticated instances, after this remedy had taken effect and produced a salivation, the disease terminated in the usual fatal manner. If it has ever been cured by mercury, it has been in consequence of a *counter-impression* communicated to the whole system, and not in consequence of the salivation ; for a salivation is a constant symptom of the disease, so that if it were curable by a flow of spittle, it would cure itself.

“ If arsenic or lead have ever been of service in hydrophobia, it must have been by producing a similar counter-impression.

“ Considering that the poison of a rabid animal produces *an excessive increase or morbid alteration of the natural sensibility*, that (as Mead has remarked) it is common to all
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who are bitten by a mad dog, that they can ill bear the impression of objects upon the senses, that all feeling is painful, that the slightest touch or rubbing of the limbs hurts, that the least noise is offensive, and the opening or shutting of a door affrights as if the house was falling; that the eyes so ill bear the light, that even the sight of any thing white is intolerable; that, in like manner, the inward membranes are so tender that they cannot suffer their natural sensation; that the common coolness of fresh air is disagreeable to the lungs; that the making of water gives uneasiness in the urinary passages; and, lastly, that there is a perpetual restlessness from the beginning of the attack to the end: considering that the poison produces these effects, we should *à priori* have pronounced opium to be the remedy; but experience has shown that it has here no curative power. It failed in Dr. Vaughan's trials; it failed in the instance of the French woman under the late Mr. John Hunter's care; and it failed in the cases lately published in the Medical Records and Researches. In some of the first-mentioned trials it might be objected that it was not administered in doses sufficiently large; but this objection will not apply to the last-mentioned cases, in one of which (William Yates) it was given to the quantity of one hundred and eighty grains in the space of fourteen or fifteen hours.

“ From the failure of opium, both in moderate and large doses in this disease, it may be presumed that other narcotics, such as stramonium, belladonna, nux vomica, or tobacco, will have no better effect. Whenever they are given in hydrophobic cases, it would seem advisable to combine them with powerful aromatics; indeed it may be doubted whether the aromatics, given without the narcotics, might not answer best; so opposite does the nature of this disease appear to be to that of an inflammatory affection.

“ Dr. Rush has shown that the provoking of some degree of inflammatory action is necessary to the cure of tetanus. Now, although I do not see with him the close analogy between this disease and rabies; yet I think it probable that the exciting of some degree of fever and inflammation may have a salutary effect in cases of hydrophobia. Indeed there is no example of a person recovering from an animal poison introduced into the system, without more or less inflammatory action. The poison which produces the plague is often most fatal when it is accompanied with the least degree of fever; and swelling and inflammation of the bitten part, together with increased heat over the whole body, are the usual forerunners of recovery in cases of viper-bites.

“ On these grounds there is a reasonable presumption that *wine* and *aromatics* may have a beneficial effect in rabies, provided the aversion to liquids is not so strong as to render the exhibition of wine impracticable. Perhaps the *nitrous acid*, or other mineral acids, or vinegar (as mentioned by Dr. Ferriar), might be advantageously mixed with the wine. The *acetum aromaticum* Ph. Ed. seems preferable to common vinegar. At the same time wine and vinegar may be injected up the rectum. These things are to be administered on the first appearance of the symptoms characteristic of rabies; for as the disease advances, neither wine nor any other liquid can be got down the patient in quantities sufficient to produce a powerful effect; and there is sometimes an equal impediment to the administration of clysters. Yet even in this state of things we are not without resource. Some of the *concrete acids* (such as the essential salt of tartar, the essential salt of lemons, or even the flores benzoës) may be given, joined with about half as much powdered *capsicum*, or other strong aromatic, and divided into small portions, to be enveloped in thick paste, made of flour and water, and formed into small boluses. Not less than

twenty or thirty grains of the concrete acids, nor less than eight or ten grains of the capsicum, should be given for a dose. In administering remedies against a disease so rapid in its progress, we must exceed, and that considerably, the ordinary measure.

“ As ipecacuanha in small doses proves so serviceable in some spasmodic disorders, it might perhaps be advantageously joined with the acids and aromatics above mentioned, in hydrophobia. Four or five grains of the powdered root might be a sufficient dose. Some degree of nausea, and the consequent perspiration, would probably be of use; but it does not seem desirable to provoke vomiting in the beginning of the disease, as that would interfere with the operation of the other medicines.

“ While these things are administered internally, topical applications are not to be neglected. Where the bite is in a part that will admit of it, a ligature (as proposed by Dr. Percival) should be applied above the cicatrized wound. This will prevent farther absorption. At the same time the bitten part may be opened or destroyed by the application of the lunar caustic, or concentrated mineral acids. Inflammation and ulceration excited in this manner promise, from what we observe in the instance of viper-bites, to be productive of the best effects. After the corrosion of the cicatrized wound, by the means just mentioned, the ligature which had been passed round the limb should be removed.

“ It would also be useful to excite inflammation and ulceration in other places besides the bitten part. With this intention, caustics might be applied to the arms, and perhaps the thighs. When the urgent symptoms abate, and medicines and food can be more easily swallowed, it will be no difficult matter to support the strength of the patient under the discharge from the sores occasioned by the caustics. In this stage of the disorder, the Peruvian bark

may be given freely; and, to allay irritation, opium occasionally in moderate doses."

* * * In our next number we shall take notice of another publication by Dr. Pearson, which has just been received: E. E.

ART. XI. *Du Régime diététique dans la Cure des Maladies.*

Par C. J. TISSOT. Paris, An VI.

THIS treatise contains some useful dietetic regulations, arranged under distinct heads or classes. In the *first* section, the author considers the effects which different alimentary substances, &c. produce in the body; the *second* includes a variety of observations respecting the temperaments, habits, passions, and sexes, of patients; the *third* and last treats of the causes of several disorders to which the rules of M. Tissot are applicable. X.

ART. XII. *Opuscules Chymiques, &c. de PIERRE BAYEN.*

Octavo. Two volumes. pp. 850. Paris, An VII.

THE various detached pieces of this celebrated chemist are here collected into two volumes; and will, on perusal, afford abundant information to an inquisitive mind. M. Bayen's dissertation on the sulphureous springs in the valley of Luchon, adjoining the Pyrenean mountains, occupies a large part of the first volume: he also gives, in this volume, a detail of experiments made on several precipitates of mercury, and on the mercurial syrup of BELET. The second volume contains an analysis of a spathic iron ore in Germany,—an inquiry into the chemical properties of certain kinds of marble, &c.—the Suabian mode of preparing the essential salt of sorrel,—with a long paper on the nature and effects of tin. U.

ART.

[Concluded from p. 313.]

IN our last number we laid before our readers the opinions of Dr. Hufeland respecting the causes of this disease, and finished with the dietetical means he recommends in the cure. We now proceed to the

Medical Treatment.

There is no disease which requires more patience and constant attendance, on the part of the practitioner, than that of scrophula. The first object is, to prevent the increase of the disease; and when this is attained, attention should be paid to the age of the patient, and the growth of his body. The best season to attack this disease seriously, is the spring of the year.

The removal of external symptoms, says Professor Hufeland, should not be considered as a certain sign of having cured the disease; they may all disappear, and yet the scrophulous disposition may remain; for they are often seen soon after to reappear, and the disease makes more ravages in the constitution. The metastasis of the scrophulous virus upon the internal organs is often to be attributed to the disappearing of external symptoms.

There are no specific remedies against scrophula. A remedy which has been of the utmost utility in one case may in a similar case be very hurtful. It may happen also that in certain constitutions, and under very different circumstances, the same medicine may be of the utmost service.

The remedies which are employed should be changed from time to time; for it is well known that scrophulous complaints vary with the sensibility and irritability of the lymphatic system. It is also a well-known fact, that the sensibility is allayed proportionately to the repetition of the impression it receives, and that remedies which have been
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long in use do not produce the same effects which they did at first.

Amongst the great number of remedies which have been recommended against scrophulous affections, the best are *emetics*, which not only have the advantage of evacuating the *primæ viæ*, but act also as stimulants to the lymphatic system, excite absorption, and increase its activity. They should be employed at the beginning of the disease, and their use should not be laid aside in the course of treatment, for they often assist the effects of other remedies; but it is to be remembered, they should never be employed but in small doses.

Purgatives, as well as emetics, have the double advantage of clearing the intestinal canal, and of exciting the action of the lymphatic vessels; but as the ordinary anti-phlogistic laxatives, neutral salts, tamarinds, manna, &c. have not any tonic quality in combination with that of evacuating, warm purgatives should be preferred, as rhubarb, jalap, aloes, &c. which not only purge, but give tone to the intestines. *Jalap* may be given to children only two months old, in the dose of from four to six grains, mixed with magnesia. It is a most excellent remedy in obstinate obstructions of the intestinal canal and mesentery, accompanied with atony and weakness, and for which neutral laxative salts have been administered without success, and rather tended to increase the disease. *Jalap* may also be mixed with the tartarized tartar, and with the sulphur auratum antimonii; great benefit will arise from its use given in small doses for several weeks.

Aloes, when employed with precaution, possesses the property of exciting the oscillation of the abdominal vessels, and of killing worms; it possesses also a tonic power, which may be supposed from its extreme bitterness, and is proved by its beneficial effects in chronic affections of the stomach, as vomiting, flatulencies, indigestions, want of appetite,

appetite, &c. It acts also upon the liver, and ameliorates the bile. It is employed with considerable advantage, given in small doses, in scrophulous cases accompanied with relaxation, insensibility, coldness, viscidities in the abdominal secretions, and when there are worms. It is aperient and strengthening, like rhubarb. More powerful laxatives may be given at intervals, to purge away the fæces which it has prepared for expulsion.

Rhubarb is a valuable medicine in scrophulous atrophies and mesenteric fevers; it purges and is strengthening at the same time. The best preparation is the vinous tincture of rhubarb.

The *Gratiola* (*Gratiola officinalis* LINNÆI) is extremely useful in viscous obstructions, and in removing the inertness of the lymphatic system in adults. A girl, eighteen years of age, was relieved of very violent symptoms produced by a scrophulous constitution and obstructions in the belly, by its use. She took every morning a scruple of the powder, and at night a very gentle saline laxative. Dr. Wendis recommends this remedy, as having seen it employed with very great success, in cases of scrophulous ulcerations of the feet. The leaves of the *gratiola* are given in powder, in the dose of from several grains to a drachm to adults. It is also employed in the form of an infusion.

Generally, in treating obstinate scrophulous cases, and during the use of other remedies, it is necessary to give occasionally somewhat drastic purges. The author bestows many praises on the following pills, the number of which he proportions to the age of the patient:—℞ Resin. jalap. Extract. panchymagog. Calomel. pp. āā ʒj. Misc. Fiat massa in pil. lxxx dividenda.

Antimonials act principally upon the stomach and intestinal canal, in which organs they excite particular actions. By virtue of this action they produce, sympathetically, in the lymphatic system, an irritation of a different nature from

from that of the disease, and which tends to destroy it as well as to relax the spasms of the vessels. They have a particular action upon the secretory organs, and should be given in small doses, when they will fulfil almost all the indications, except that of restoring the tone to weakened and relaxed parts. Thus antimony not only tends to destroy the specific irritation of the lymphatic system, but also removes obstructions and ameliorates the secretions, and principally that of the skin, especially if its use be continued for a certain time. It may be administered in every period of the disease, and even when it appears to be extremely complicated. The best preparations of antimony are those which are in combination with acids: tartar emetic, for example, alone, or in combination with liver of sulphur; the sulphur auratum antimonii, and kermes mineral. The sulphur auratum potabile is more heating than the above, and therefore may be employed with advantage when it is necessary to excite a strong irritation, or to produce an artificial fever. Antimony, in substance, may also be employed with advantage, especially when the stomach is irritable, and the common preparations occasion nausea and vomiting: the preference should be given to it also where the stomach is very much relaxed, for crude antimony does not weaken so much as antimonial salts. It should likewise be preferred when it is necessary to use it for a considerable time, and to excite perspiration, as in obstinate scrophulous eruptions of the skin.

Next to antimony and its various preparations, *mercury* is most generally employed in the cure of scrophula. It is given with greater or less success in all the varieties of this disease; nevertheless, the practitioner cannot be too circumspect in its use when there is a low fever, an inclination to hæmorrhage, and where the stomach is very irritable. In the latter period of the disease, when the putrefaction and colliquation approach, it cannot be used at all. Care must

must be taken lest salivation be produced; for in this disease every thing that weakens is hurtful; yet in very obstinate cases, where the strength is not reduced, it may sometimes be given until it produces a tendency to salivation: not that this evacuation can ever be salutary, but with a view of being convinced that the mercury has entered the system, and that it has exercised its peculiar effects. The long-continued use of mercurial preparations produces relaxation and a diminution of the vital power, so that it becomes absolutely necessary to give at the same time some tonic remedy. Sometimes mercury, instead of alleviating the symptoms, augments the disease. In these cases, its use must be laid aside for a time, and recourse had to strengthening remedies, after which it may again be employed with advantage; for, in general, it is the weakness of the system which opposes its salutary effects. In very irritable habits, it is often necessary to combine narcotics with mercury, and also in cases where the local affections are very painful: the best narcotics are opium, hemlock, and hyosciamus. It often happens that the mercury removes the local affections without curing the disease, as is observed in the venereal disease; so that it must not be imagined that the disease is removed when the most manifest symptoms disappear. The external use of mercury is often preferable to its internal use, especially when it is necessary to guard against irritating the stomach and intestinal canal; and great benefit has arisen from its use in this way in very obstinate local affections. When mercury has been long employed, it is necessary to change the preparation; for when a preparation has been some time in use, it fails to excite that species of irritation it did at first.

Much praise is bestowed on *combinations of mercury with sulphur of antimony*. These appear to modify the action of the mercury upon the body, to diminish its tendency to affect the salivary glands, and more particularly to diminish
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its action upon the skin. Thus æthiops, mineral and antimonial, are preferable to all other preparations for children; as it can be given to the most delicate without exciting salivation. The author is extremely partial to this remedy, and orders it for children from three or four years of age, in the dose of four grains, with as much cicuta, magnesia, and sugar, twice a day.

The *muriate of barytes* acts by a particular irritation upon the digestive powers, upon that of the glands, and consequently upon the lymph. It removes mucus from the intestinal canal, and facilitates the absorption of attenuated humours. It cannot, nevertheless, be considered as a remedy to entirely destroy the scrophulous disposition, notwithstanding that it weakens and deranges the action of the digestive organs less than mercurials and antimonials. Half a drachm may be dissolved in an ounce of distilled water, and from ten to fifteen drops of this solution given every three hours. Its activity in affections of the skin is singularly augmented, if, to each ounce of the solution, three drachms of emetic wine be added; or when æthiops mineral, dulcamara, or cicuta, is given at the same time.

Barytes, or *common terra ponderosa*, reduced into a fine powder, is of infinite service in cutaneous eruptions, applied externally, as well as in opacities of the transparent cornea.

The *muriate of lime* appears to have similar properties to barytes, but rather more irritating, excites perspiration, and acts on the kidneys; so that it should be used with precaution. The author informs us, that he gave it to a child six years of age, who had for some time had scrophulous swellings of the glands of the neck. He prescribed one drachm of the muriate of lime to one ounce of distilled water, of which thirty drops were to be taken every three hours. This remedy procured daily fluid stools, and acted on the skin; in the course of fifteen days they were moveable and considerably diminished.

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Much praise has been bestowed on the use of *bark*, and other bitter tonics, in the cure of scrophula; and notwithstanding that their utility has been greatly exaggerated, the reputation of Peruvian bark in this disease is, to a certain point, fully established; for if it be true that the atony of the lymphatic vessels be the principal predisposing cause of scrophula, and that its proximate cause be a specific irritation, different from that going on during a healthy state of that system, the Peruvian bark in this double point of view is equally indicated as one of the most powerful tonics we are acquainted with, and as one of the best remedies to diminish excessive irritability; nevertheless, it should not be employed indifferently in all cases. There are cases where it would be not only useless, but extremely prejudicial; as in those attended with particular inflammations or suppurations, depending on a peculiar state of excitement. Great benefit arises from using, in conjunction with the bark, other restoratives, especially at the termination of the cure. After having employed the most efficacious medicines, by whose means the viscous matter has been set in motion, and the spasm removed, there often remains stagnation and languor in consequence of the vessels not possessing the necessary power to contract and re-act, with efficacy, upon their contained fluids. This affection is manifested by weakness, which points out the continuance of restorative remedies, the use of which is not alone sufficient, but tends rather to increase the evil. If under these circumstances bark be administered, it is astonishing to see with what rapidity the obstruction disappears. It is the only remedy which can completely terminate the resolution.

The author is of opinion that the best method of administering this remedy is, by making a cold infusion of half an ounce to eight ounces of water, which should infuse for several hours, repeatedly stirring it, and then poured off for
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use. One ounce of the same bark should then be boiled in twelve ounces of water to six. The decoction and infusion are then to be mixed together, and one or two spoonfuls given every two hours, more or less, according to the age of the patient and other circumstances.

The decoction of *galls*, prepared after the manner they make coffee, is less astringent, and less tonic than that of bark; it is, nevertheless, a good strengthener, and an excellent resolvent in all obstructions which depend on weakness. Dangerous scrophulous atrophies have disappeared after a long use of this remedy.

Iron is more astringent than bark; hence it cannot be employed when there is much phlegm and obstruction, caused by a viscous and tenacious matter. It is never of use when the arterial system is much irritated, and when there exists a state of inflammation. It should not be administered when there exists a dry cough, flying pains about the chest, or internal inflammations; but great advantage will arise from its use in cases where the scrophulous disposition is characterized by pallid countenance, an appearance of weakness, relaxation, and a want of natural heat; also in subjects labouring under serous or mucous discharges, and likewise where acidities of the primæ viæ are frequent.

Amongst the aromatic and exciting remedies, *sassafras* merits particularly to be distinguished. It increases the digestive powers, corrects the scrophulous disposition, and gives energy to the muscular fibre. It excites the serous secretions, and is useful in scrophulous cutaneous eruptions, and glandular swellings. Professor Hufeland has often employed it alone with success, in tinea capitis, in the form of tea, occasionally administering laxatives. He is of opinion that *sassafras* possesses the property of changing an internal scrophulous disease to an external one, and of causing internal stagnant acrimonies to be conveyed outwards. It should not, he observes, be administered where

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the fibres are tense, the arterial system irritable, or even where there is a disposition to inflammatory diathesis. He recommends it to be drank in the form of cold infusion, to which some hemlock may occasionally be added.

Considerable benefit arises from the administration of narcotics in the cure of scrophula, notwithstanding that they cannot be employed as curative remedies, as they possess no tonic power. They resolve obstructions, and hard glandular swellings; remove spasms, more especially when employed externally; they ameliorate the suppuration of ulcers, facilitate the absorption and evacuation of the scrophulous acrimony, and defend the irritable organs against its action, by diminishing their sensibility.

Cicuta claims the first place in this class of remedies, on account of its antiscrophulous quality. The virtue, however, of this plant varies considerably, according to the soil in which it grows, and the manner in which it is prepared; and this circumstance has caused many practitioners to doubt its efficacy in this complaint. That is not the best which grows upon mountainous situations, but that which is gathered in vallies from a humid soil. The manner of administering it with the greatest success, consists in giving the fresh expressed juice from twelve to sixty drops, and more, at a dose. With regard to the extract, its quality differs astonishingly, according as it is better or worse prepared.

Opium is of all the narcotic remedies the most improper in this disease; it weakens the digestive faculties, and rarely agrees with the primæ viæ, which, in scrophulous patients, are most commonly filled with saburra. Great advantage, nevertheless, arises from its use in cases where there are extremely painful ulcers, and in certain inflammations.

Hyoscyamus, or henbane, possesses all the advantages of opium, without its inconveniencies. It does not produce costiveness,

costiveness, but rather increases the number of evacuations; so that it may be employed where there is much saburra in the primæ viæ. It is used externally to lessen inflammation, and to allay the irritation of very sensible parts. Fomentations with the leaves of henbane and marshmallow flowers, boiled in milk, to which a few grains of the acetite of lead may be added, forms a most excellent topical application in scrophulous ophthalmia.

Belladonna passes for a very excellent remedy in glandular swellings which have a tendency to become scirrhus, and also against chronic and callous ulcers; it is also employed with success in convulsions caused by scrophulous irritation. An infusion of the leaves of this plant in vinegar, mixed with honey, is a preparation in which the belladonna loses in part its virulent quality, and becomes a remedy that may be administered to infants with perfect security.

Bulcamara, or bitter-sweet, may be administered more readily than belladonna; it attenuates and purifies the lymph, and may be given with strengthening remedies: the dose should be increased every day. It is the practice of the author to begin with half an ounce of decoction daily, and to add a spoonful to each dose, every second day, until there be a tendency to vertigo and general indisposition, at which time its good effects begin to be apparent. The bitter-sweet is very useful in scrophulous diseases of the lungs, such as cough and asthma arising from mucosities or tubercles, and in the commencement of scrophulous phthisis. In the last mentioned disease it may be given with advantage with the lichen islandicus, especially if the lungs be loaded with phlegm.

The *digitalis purpurea* is also a very active remedy in resolving tumours of the glands, but more particularly so when given conjointly with mercury. It attenuates lymphatic and serous extravasations in coughs, asthma, and scrophulous dropsy; and it is very efficacious in form
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of fomentation or ointment, in dispelling glandular swellings. An objection may be made, with some foundation, against this remedy, which is, that it disturbs and weakens the sight; but most narcotic plants produce more or less the same effect; and it does not take place when administered in small quantities, the only way in which it should be given; for if no good effects arise from its administration in the former way, it is probable that no benefit will ensue from large doses. The powder of digitalis, when of a good quality, should never be given in larger doses than two grains to adults, and an eighth part, or a quarter of a grain, to infants, two or three times a day. Its use should not be continued for a length of time, but stopped for certain intervals; and it should never be exhibited more than five days together. Should any unfavourable symptoms arise from its use, small doses of the volatile salts of hartshorn should be immediately given; and if they be not sufficient to allay the symptoms, the application of a blister is mostly successful.

Burnt sponge appears to act by stimulating the lymphatic system, and particularly increases the action of the absorbents. These effects depend, probably, upon the combination of the calcareous alkaline and empyreumatic substances of which it is composed, and which cannot be employed separately with the same success; other substances, as burnt leather and woollen materials, act in the same manner. It is given generally for swellings of the glands, bronchocele, and watery accumulations. It should never be given to persons whose lungs are weak and irritable.

Alkaline salts attenuate the mucus, act as stimulants on the lymphatic system, and favour secretion and absorption; they destroy acidities of the primæ viæ, which have such influence in the formation of scrophula, and they increase considerably the quantity of urine. Mineral and vegetable alkalies may be employed indifferently, but the former appear to affect the intestinal canal less than the latter.

Absorbent earths, and particularly magnesia, which is the mildest of all, destroy acidities; but they fatigue the stomach, and should not be given in large doses.

Lime-water has the same property as absorbent earths, without possessing any of their inconveniencies. It is one of the best remedies we are in possession of to dissolve obstinate obstructions of the glands, dissipate tubercles of the lungs, and to stop the progress of scrophulous phthisis in its commencement.

The *resin of guaiacum* increases almost all the secretions, purifies the *primæ et secundæ viæ*, and dissipates mucus. It agrees less with irritable and sanguineous habits than with the phlegmatic, and those who are extremely weak.

The *coltsfoot*, or *tussilago*, is a very good remedy against obstructions of the glands, cutaneous eruptions, and especially against scrophulous cough, and pulmonic affection. It agrees very well with children who have weak lungs, even when fever is present. The fresh juice of the leaves is given in the dose of three or four ounces daily, and, when the fresh leaves cannot be obtained, a decoction of an ounce of the dry leaves may be substituted, varying the quantity according to the age. These are the principal medicines which our author mentions in the treatment of scrophula. He then proceeds to relate several other means, the adoption of which he thinks of the utmost importance in the cure of this disease.

OF GLYSTERS.—When the seat of scrophula is in the abdomen, as in cases of scrophulous atrophy, bad digestions, habitual constipations, and affections of the liver and spleen, the author lays great stress upon their use. He does not consider them as ever prejudicial, or as weakening the parts, when strengthening ingredients are added, and they are administered cold.

OF ARTIFICIAL ULCERS.—Artificial ulcers are not to be regarded as a radical remedy; on the contrary, when they afford an abundant discharge, they weaken, and increase the principal

principal cause. When, however, the discharge and irritation they produce are moderate, they are sometimes highly beneficial in diverting the scrophulous acrimony from important organs; it is with this view they are frequently employed against diseases of the eyes and lungs. They set stagnated humours in motion, relax the spasm, and, by the counter-irritation they produce, recall the action of the vessels. Artificial ulcers are very salutary in many eruptive diseases and ulcerations of the skin; for in almost every disease of this kind, the principal cause is not only suppressed perspiration, but also spasm on that part of the skin which is the seat of the eruption, or of the ulcers producing a viscous secretion in those parts. Irritating topical applications applied to the skin may remove these two causes by affording a new drain to the acrimonious humour.

OF MEDICATED BATHS:—Medicines are introduced into the body by means of medical baths, without weakening the stomach and organs of digestion; and, according to the author, they are taken into the lymphatic system, the principal seat of the disease, without undergoing any mixture. In external affections, the Professor recommends them warm, as good topical remedies, and advises that the patient remain in them half an hour or an hour at a time. The medicated baths to be preferred, and which are most generally employed, are those of hemlock. The quantity for children is four or six handfuls of the fresh plant, and for adults in proportion, a few handfuls of mint, camomile flowers, and a pound of bran; the whole is to be put into a bag, and boiled for some minutes in a sufficient quantity of water, frequently squeezing the bag. The decoction is then to be poured into the bath, and the vapour to be retained by covering it with a proper cloth; and the patient should smell the vapour of warm vinegar. The use of these baths should be continued for several weeks; it is not before a certain time that they have any manifest effect, which

is, however, sometimes astonishing: they resolve hard tumours, dispel eruptions, and heal ulcers, and likewise those painful tumours which sometimes appear upon the bones. The baths of soap are gently stimulating, and increase the secretions; four or six ounces are sufficient for a bath for a child. Baths of Peruvian bark and aromatic herbs are likewise of great service in this disease. The author begins, generally, with the hemlock baths, and afterwards mixes them with those of the Peruvian bark, and finishes with the bark both alone or with baths impregnated with iron. Three ounces of bark is sufficient for a bath; and some handful of lavender, camomile, mint, sage, &c. may be added. If the diseased have a scrophulous caries, a spina ventosa, the calamus aromaticus and sabine are to be added. These baths, in the opinion of our author, are very strengthening, and are said to give to scrophulous children who are weak and emaciated a surprising degree of strength in a very short time. He also greatly praises baths of lime-water and sulphur; which he prepares for children by boiling a quarter of a pound of lime and grossly powdered sulphur in twenty pints of water: this is suffered to remain for twelve hours, when it should be poured off and mixed with the bath: the sediment may be employed three or four times in the same manner. Sulphur, the author is of opinion, is more useful employed externally than internally, especially in psorical eruptions, obstinate ulcers, glandular indurations, hardness of the cellular membrane, and swellings of the joints; and the above method of exhibiting it is the most efficacious, and its utility is most obvious in those who are not too irritable nor sanguineous, nor disposed to fever.

LINIMENTS, OINTMENTS, AND PLASTERS.—Dr. Hufeland very justly observes, that the practitioner is often obliged to assist the action of internal remedies by external applications. The camphor liniment and volatile spirit of sal

sal ammoniac, prepared with lime, is a preparation in common use. The following ointment is recommended by the author as more efficacious :

Unguentum resolvens.

℞ Ung. ex althæa, Fel. bov. recent. Sapon. Venet. sing. ℥iij, Petrolei ℥ij, Sal. volat. corn. cerv. ℥ß, Camphoræ ℥j. These are to be well triturated and mixed together into the form of an ointment.

A coffee-spoonful of this ointment is to be rubbed on the skin of the patient every two or three hours. When applied to the abdomen, it resolves mesenteric obstructions and kills worms in the intestines, especially if a little oil of tansy be added.

Camphor, ox's gall, and squills, are highly praised by Professor Hufeland as resolvent applications. The following is his method of employing them :

Unguentum camphoratum.

℞ Camphoræ ℥j, Spt. sal. vol. ammon. ℥iij, Ol. olivæ ℥ß. The camphor is to be rubbed down in the volatile spirit of sal ammoniac, and the oil then gradually mixed with it.

Linimentum Fellis bovini.

℞ Fel. recent. bovis, Sal. culin. Ol. nucis, sing. cochlearia tria. Mix them together, and let them digest in the sun or a warm place for two days. Compresses of lint dipped in this liniment are to be applied to lymphatic tumours, and renewed two or three times a day.

Unguentum Scillæ dissolvens.

This is made by bruising a certain quantity of the fresh squill, and mixing it with caustic alkali until the mixture is somewhat mucilaginous ; it is then to be pressed through a cloth, and mixed with an equal quantity of honey and basilicon, and made into an ointment.

When plasters are thought advisable, the following is recommended :

Emplastrum dissolvens.

R Empl. galbani ʒj, Camphoræ ʒj, Petrolei ʒij, Sal.
vol. corn. cerv. ʒß, M. Æ.

ART. XIV. DR. CRICHTON on Mental Derangement.

(Concluded from page 393.)

PURSUING the inquiry into the faculties of the human mind, and the diseases to which they are liable, Dr. Crichton next notices *imagination*. This word has been indiscriminately applied to many phenomena and operations of the mind, which, although they resemble each other in their general character, are very different in their real nature. These may be divided into two classes. “The first class is quite involuntary; the other, on the contrary, is so far voluntary, that the images which occur to the mind arise from the active employment of several faculties. The objects of our dreams, the various things which are seen in the delirium of fevers, and in insanity, and the spectres which seem to present themselves before the eyes of many young people, when left in the dark, and the visions of some religious devotees, and believers in the immediate agency of spirits, all present themselves involuntarily to the mind. But the images which HOMER, SPENSER, KLOPSTOCK, and SHAKESPEAR, give birth to, and which are called productions of the imagination, are the effects of a voluntary exercise of various mental faculties, and not to be attributed to any single one to which the name of imagination ought to be exclusively applied.

“Whether the images arise involuntarily, or from the voluntary efforts of the mind, they are all to be considered as acts of the representative faculty.

“Now it may be observed that the representative faculty of the mind is often disproportionately great in regard to
the

the other faculties, especially to that of judgment. Such a case is to be considered as highly dangerous, not only inasmuch as it is the source of many errors in judgment, but also as it is a powerful *genitrix* of many permanent kinds of delirium.

“ A disproportionate activity of the representative faculty of the mind may either be born with a person, or it may be accidentally excited.

“ In both cases the images of the mind make a stronger impression on the brain than that which the impressions of external objects do. The accidental causes are various.

“ 1st. Diseased arterial action, as occasioned by, *a.* Fevers, and other acute diseases. *b.* Common and specific inflammation of the brain. *c.* Intoxication. *d.* Certain poisons.—2dly. Causes which counteract the impression of external bodies. *a.* Diseased viscera, &c. *b.* Sleep.—3dly. Causes which exalt imagination, and at the same time destroy judgment. *a.* The faculty of fiction too frequently exercised. *b.* Strong passions.”

It does not necessarily follow that a natural “ disproportion between the representative faculty of the mind and judgment, shall inevitably lay the foundation for such aberrations of intellect as have been just now described. Except there is, unfortunately, a family taint, it may be corrected, provided a judicious mode of education be adopted. The great art in such cases consists in strengthening judgment, and in exercising the memory in the correct enunciation of facts.”

Having made these observations on Imagination, the author proceeds to consider *Genius*, and the diseases to which it is most exposed. Genius, he justly observes, is the result of the combined influence of several faculties; and men of genius, as they are called, differ from each other according as one or other of these faculties predominates. Imagination and judgment being those which most
strongly

strongly characterize true genius, a very complicated process takes place when it is in strong exercise, and hence those who possess it are exposed to a variety of disorders from intense application, and frequent repetition of the same impressions.

“ All exertions of the mental faculties, when too long continued, or too violent, produce fatigue, and debilitate the corporeal part of the animal.

“ The bad effects of this corporeal affection are often exhibited in a very powerful manner on many of the viscera essential to the healthy state of our frame. The force of the heart and arteries is diminished, and the various secretions, therefore, are often lessened; the excretions are often retained longer than they ought to be, and, like useless and foreign bodies, they irritate, and cause disorder in the parts in which they are contained; respiration becomes slower, and confined, the organs of digestion are impaired, and digestion and chylication are injured; hence a sense of languor, anxiety, dejection of mind, peevishness, spasmodic affections, and all the consequences of a debilitated fibre, and disordered state of nerves, ensue.

“ The difference between the exercise of the body, and that of the mind, consists in this; the former, although it also exhausts the strength of the muscular fibre, and the energy of the nerves, yet proves the indirect cause of these principles being more quickly and perfectly restored than they otherwise would be, for, by supporting the activity of the heart and arterial system, they lay the source of a more quick and perfect supply of the various parts and principles which were wasted by fatigue. But the over-exercise of the mind weakens the body both *directly* and *indirectly*; directly, by exhausting the principle of irritability, and the energy of the nerves; and indirectly, by allowing the heart and arterial system, and the stomach and chylopoetic viscera, to become debilitated for want of a due quantity

quantity of bodily exercise." To these evils must also be added a diminution of the natural quantity of sleep.

"The increased action of the blood-vessels of the brain, by keeping that organ in a constant degree of tension, and the sensorial impression, from the intensity of thought, becoming remarkably vivid, act like strong and powerful stimuli, and induce a degree of excitement nearly approaching to phrenitis.

"If the causes of this state occur frequently, a real and permanent delirium is often the consequence; for the mind of a person then becomes entirely occupied by a certain class of notions, which, from the sensorial impressions, acquire a degree of vividness that is unnatural to any perception, except those derived from some of the external senses.

"When once the objects of thought have acquired this degree of force, they obstruct the usual impressions derived from external objects; and this circumstance increases the belief in the existence of his illusion.

"This very dangerous state of mind is always increased, *cæteris paribus*, in proportion as the objects of study are few in number; for when they are numerous, and do not belong to one subject only, the habit of easily passing from one chain of associated ideas to another increases; and thus all the faculties of the mind have a more equal degree of exercise.

"Whether or not this hypothesis be received as a satisfactory explanation of the origin of this singular aberration of mind, the fact is undoubted, that men who are too much addicted to the exercise of that kind of fiction which is necessary in the composition of what are called works of imagination, often pass altogether from the real world into an ideal one, where they take the inspirations of fancy for existing form, and illusions for real substance. Those simple acts of judgment which relate to the common occurrences of life, and which constitute what is well denominated

minated *common sense*, being much neglected by such people, the aberrations of reason are seldom rectified by themselves; and indeed they do not listen with pleasure to the reasoning of others on their situation."

Examples illustrative of this kind of disease are then adduced, all tending to prove the melancholy truth, that "representations of the mind, when frequently renewed by acts of imagination, at last acquire a degree of vividness which surpasses those derived from external objects; and as the principal quality of a mental perception, or representation, which makes us believe in the reality of the object or objects which it represents, is the clearness of its parts, it is not wonderful that men of genius, who often confine their attention to one branch of study, should be more exposed to such illusions than any other class of people.

"Before these kind of deliria occur, the bodily health of the person generally suffers, and this disordered state of health is very similar to that which arises from a sedentary life, and from the effects of grief."

This part of the work is concluded by the consideration of volition and its diseases. The natural history, if we may so call it, of this faculty is given, but without entering at large into the various abstruse questions with which metaphysical writers on that subject have generally teemed. Its diseases Dr. Crichton considers to be those only on which its full effect on the bodily organs is not produced; and these he illustrates by the two defects in speech, called *hesitation* and *stammering*. But if these be regarded as diseases of volition, we do not see why another very common occurrence, both in febrile and maniacal delirium, should not be classed among them, namely, the high degree of effect volition produces by exciting the muscular powers in an unusual degree. Perhaps it may be worth Dr. Crichton's consideration, whether the diseases of this faculty ought not to be distinguished into two classes—those in which

volitions

volitions are imperfectly excited by any given impression, and those in which they are excited too strongly, or, as it sometimes happens, in too great numbers to be fully executed.

Having thus reviewed the various faculties of the mind, Dr. Crichton proceeds, in the third book, to consider the passions and their effects. This part of the work is divided into six chapters :—the *first* contains an analysis of human action, or an inquiry into the source of the passions ; the *second* treats on *joy* ; the *third*, on *grief* and *melancholy* ; the *fourth*, on *fear* ; the *fifth*, on *anger* ; and the *sixth*, on *love*. The work is then concluded, as we have before observed, by a summary of the whole, and a nosological arrangement of mental diseases. An appendix is added, containing a variety of remarks, and a collection of many interesting facts illustrative of the subject.

In the chapter on the source of the passions, the author observes, that no passion can arise without previous desire or aversion, and that these cannot occur without some previous feeling of pleasure or pain. He then considers those desires and aversions which are connected with one or other of the three following objects : the preservation of the individual, the propagation of the species, and the preservation of the young offspring.

“ The feelings which give rise to the desires which impel us to the performance of such actions as are necessary for our own preservation are of two kinds ; they are either painful or pleasurable.

“ The painful ones, which are by far the most powerful, are,

“ 1st. The feeling of hunger.

“ 2dly. The painful bodily anxiety which arises when our respiration is impeded, either by mechanical means, or by a privation of good air.

“ 3dly. The uneasy sensation of extreme heat or cold.

“ 4thly.

“ 4thly. The uneasy sensation arising from the retention of various matters which ought to be expelled the system.

“ 5thly. The pain of confinement, or want of exercise,

“ 6thly. The pain of weariness and fatigue.

“ 7thly. The pain of external injury, or internal disease.

“ The pleasurable stimuli by which man, as well as almost all animals, are excited to the same actions, are,

“ 1st, The pleasures which the various articles of food produce on the organs of taste.

“ 2dly. The pleasure of breathing a pure atmosphere.

“ 3dly. The pleasurable feeling of the skin from moderate warmth.

“ 4thly. The pleasure arising from the being relieved from matters which irritate when confined and pent up.

“ 5thly. The pleasure arising from various exercises.

“ 6thly. Relief from weariness and pain.

“ The painful corporeal feelings by which man, in common with other animals, is impelled to the propagation of the species, arise from the fulness and distension of the spermatic vessels, especially those which form the epidermis. In the female sex it seems to arise from some action in the ovaria. The pleasurable feelings which act as additional motives for the voluntary actions which arise out of this desire, are the gratifications which are experienced by the union of the sexes.

“ It has been already observed, that man does not seem to be urged by any corporeal feelings to the preservation of the offspring. In women, however, there is a very painful one arising from the distension of the breasts, in the relieving themselves from which they experience much pleasure. It is on this account that the love which the mother has for the young offspring is, in general, much greater than that of the male parent.”

The origin and effect of desire and aversion are thus explained :

“ When

“ When a person is deprived of food, of rest, of exercise, of a companion of the opposite sex, or of any thing which is necessary either for his own preservation, or that of his young offspring, the painful or uneasy sensation that accompanies such wants brings into his mind, or, to use the common expression, causes him to think of the objects by which such feelings are to be relieved. He then *desires* to possess them.

“ We often foresee a number of impediments which are placed in the way of our desires, and we are affected with a disagreeable feeling in consequence of this foresight; to this we give the name of *aversion*.

“ In every desire we foresee an agreeable something, (the cause of some pleasurable sensation, or mental perception, or both,) which by a constant and powerful effort of the mind we endeavour to realize.

“ In every species of aversion we foresee a disagreeable something, (the cause of some painful sensation, or mental perception, or both,) which, by an effort of mind, we endeavour to avert from us; or, in other words, we endeavour to realize an opposite sensation.

“ The effort of the mind employed in desire and aversion, of which every person is conscious, will be found, if narrowly examined, to be a strong effort of attention. By it the idea of the thing desired is retained to the almost total exclusion of every other one; and by this means the objects of our desires and aversions often acquire an amazing degree of vividness and strength, considering them as mental stimuli.

“ When our animal desires and aversions are opposed, or not gratified, new desires and aversions arise, which are attended with painful and pleasurable feelings that are totally distinct from those which gave birth to the primary desire or aversion. The feelings which accompany these are felt about the præcordia, and are at times of such

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a powerful

a powerful nature as often to destroy all the operations of cool reason, and to throw the human frame into the most violent agitation and disorder. These new desires and aversions thus characterized by pleasurable or powerful feelings at the præcordia, are called passions.

“ Animal desires and aversions are distinguished from passions, in the first place, by a difference in the seat of the corporeal feelings. The feelings which accompany the former are only felt in those parts of the body where the uneasy sensation that gives rise to the desire exists; the desire of food is attended with an uneasy sensation in the stomach, called hunger; the desire of drink is attended with an uneasy sensation in the mouth and throat, called thirst; the desire of repose, with an universal pain, or uneasiness throughout the whole frame, called weariness; but, however violent these desires may be, they never produce the peculiar feelings of any passion. They may, indeed, give birth to passion in an indirect manner, and then the peculiar feelings at the præcordia are felt; if, for instance, a person is long deprived of food or drink, the circumstance may excite the passion called fear; or if he is deprived of it by the violence of another person, it may excite the passion of anger, &c.; in all which cases it is evident that the mere animal desire operates in an indirect manner.

“ In the next place, all the desires and aversions which are called passions are distinguished from mere animal desires by the clearness of the object foreseen, and by the object foreseen being both the one which gave rise to the passion, and also the one against which, or towards which, all the voluntary actions that arise in the passion are directed. A person who excites in us the passions of anger, fear, love, friendship, or charity, &c. is at once the cause and the object of our anger, fear, love, friendship, or charity; but the exciting cause of animal desire is always an
obscure

obscure feeling, and quite distinct from the object against which, or towards which, our will is directed.

“ It is well known that the same passions may arise from a mental cause as well as a corporeal one. Thus grief and anger may arise not only from personal pain, but from ideal pain. Many passions, indeed, arise solely from mental causes, as piety, charity, benevolence, &c.

“ Now a curious question occurs in consequence of this observation: Upon what principle do ideas beget passions? There is no intrinsic quality in the word *honour*, which ought materially to affect any one; yet we see that it shall rouse a man to such a state of passion as to make him forgetful of one of the most powerful animal instincts, that of self-preservation; and in the indulging of which passion he often foresees certain death.”

Mental pleasure and pain operate on the same common principle.

“ Those ideas are pleasurable which the mind loves, as it were, to dwell on, and which it is anxious to retain for a certain length of time.

“ Those ideas are painful which occasion the sentiments of disgust, aversion, or distress of any kind. The prospect of attaining one's wishes; the consideration of the advantages which we expect to derive from them, after they are attained; the train of ideas which succeed each other in a lover's mind, on receiving a kind letter from his mistress; the reflections which succeed acts of benevolence; every gay inspiration of fancy, and every pleasant sport of imagination, are circumstances which the mind dwells on with delight, which it quits with regret, and which, if suddenly deprived of, it strives to recall. The prospect of some impending evil, the disappointment of a long-expected wish, the reflection arising from acts of ingratitude shewn towards us, the consciousness of our inability to relieve the distresses of a dear friend, or

a person we tenderly love, are sentiments which occasion the feelings called distress, and from which we are glad to be relieved.

“ So far are these pleasures and pains mental, but no farther; for the pleasurable and painful feelings which arise from mental causes are not felt in the mind but in the body; they undulate about the heart and breast, producing great and remarkable physical changes there; the influence of which is often extended throughout the vascular and nervous parts of our whole frame.

“ A very striking circumstance which relates to this inquiry is, that people who are endowed with much physical or nervous sensibility, are, for the most part also, more powerfully affected by mental pleasures and pains, than the phlegmatic race, whose nerves are only made to feel by means of strong impressions.

“ Upon taking a general and comprehensive view of all the ideas which create mental pleasure, it appears that they all belong to the two following classes:

“ 1st. Such ideas as represent the pleasures of the senses.

“ 2dly. Such objects and thoughts as are actually conducive to our well-being and happiness, or those which are esteemed such by us.

“ Mental pain, on the other hand, arises from,

“ 1st. Such ideas as represent the pains of the body.

“ 2dly. Such objects and thoughts as are actually destructive of our peace and happiness, or such as are considered in this light by us.”

The general effect of the passions is then described; but this, for the most part, is sufficiently known.

The remaining chapters, in which the passions are particularly described, our limits will not allow us to notice with the same minuteness with which we have reviewed the preceding parts of this work. Our chief object has been to present the reader with a view of the phenomena of insanity

sanity when actually produced, as they affect the several faculties of the mind. In the work itself, however, the reader will find many pertinent remarks on the operation of the passions in the production of insanity, with cases illustrative of them.

The whole view of this subject leads the author to the following arrangement of diseases.

“ CLASS *Neuroses*. ORDER *Vesaniæ*.

“ Genus I. *Delirium*. General derangement of the mental faculties, in which diseased perceptions are mistaken for realities; with incoherent language, and unruly conduct.—Species 1. *Mania furibunda*. Delirium, with constant raving, audacity, and fury. 2. *Mania mitis*. Delirium, with raving, and appearance of gaiety and pleasure. 3. *Melancholia*. Delirium, with dejection, despondency, and despair.

“ Genus II. *Hallucinatio*, or *Illusion*. Error of mind, in which ideal objects are mistaken for realities; or, in which real objects are falsely represented, without general derangement of the mental faculties.—Species 1. *Hypochondriasis*. Error respecting a person's own health or form, with anxiety, apprehension, and dread; flatulency, dyspepsia, palpitation, tremor, and sense of pain. 2. *Dæmonomania*. Firm belief in the immediate communication with spirits, or persuasion of the power of working miracles, without other symptoms of general derangement of mind. 3. *Vertigo*. Apparent rotatory motion of external objects, and sense of undulation in the ground, with abolished attention and thought. 4. *Somnambulismus*?

“ Genus III. *Amentia*. Diminished power of the mental faculties.—Species 1. *Fatuitas*. Imbecility of all the faculties of the human mind, particularly those concerned in associating and comparing ideas; accompanied with want of language, a stupid look, and general bodily weakness. 3. *Memoria imminuta*. Difficulty of recalling thoughts, and incorrect-

ness as to recognising objects formerly perceived. 3. *Perceptio imminuta*. Difficulty of forming distinct representations. 4. *Vis idearum associandi imminuta*. Deficiency, or total incapability of arranging one's thoughts; giving signs of confusion of intellect. 5. *Vis fingendi imminuta*. Total want of genius, or diminished genius. 6. *Vis judicandi imminuta*. Want of judgment and common sense."

We hope the author will soon favour us with his observations on the treatment of these diseases; as we have no doubt they will evince the same diligence and acuteness which he has so well applied to elucidate their phenomena.

N. N.

ART. XV. *An Essay on the most rational Means of preserving Health, and of attaining to an advanced Age; to which are added, Anecdotes of Longevity.* 12mo. pp. 105. WALLIS, London. 1799. Price 3s.

THIS essay, although it contains but little that is new, may be read with advantage, as it exhibits the sentiments of various medical writers on an interesting subject. X.

ART. XVI. *Von dem Perkinismus, oder den Metallnadeln des Dr. Perkins in Nordamerika, nebst Amerikanischen Zeugnissen, und Versuchen Kopenhagener, &c. i. e. On Perkinism, or the Metallic Tractors of Dr. Perkins of North America, with American Testimonies, and Experiments of the Physicians at Copenhagen.* Published by M. HERHOLDT Surgeon, and Assessor RAFN. Translated from the Danish; with the Observations of Dr. J. C. TODE, Professor and Physician to the Court. 8vo. Copenhagen, 1798. pp. 108.

WE propose, in our next number, to give an account of Mr. Perkins's recent experiments in England. W.

MEDICAL

MEDICAL CORRESPONDENCE.

Art. I. *History of an extraordinary Disease of the Penis, resembling Elephantiasis.* Communicated by Mr. BAKER, Member of the Corporation of Surgeons, London.

(With an Engraving.)

To the Society of Physicians and Surgeons.

GENTLEMEN,

I HAVE sent the following account of a disease which appeared to me of an uncommon nature, and which might perhaps with propriety be called a species of *Elephantiasis*, for insertion in your Medical Review and Magazine, should you, on perusal, think it of sufficient importance.

Cupid, about twenty-five years of age, a native of Africa, was sent from the island of St. Vincent, in the spring of 1799, to England, to have the advice of the faculty for a disease of his penis, which had been gradually increasing for eight years, and was considered by the medical gentlemen of that place to be incurable. He was admitted into St. Bartholomew's hospital, under the immediate care of Mr. Blicke. A few days after his arrival, a consultation was held on his case, and it was proposed that a great part of the diseased prepuce should be removed; but the sudden and unexpected departure of the ship in which he was obliged to embark, prevented its being put into execution.

He was short in stature, his hair long, and had no tendency to curl, and his colour a dark black; his feet remarkably broad, never having been accustomed to shoes. The penis was of a most extraordinary size; it extended below his knees, very much resembled the proboscis of an elephant, and had exactly the appearance to the eye of its being an increase of the body and glans penis. The infe-

rior part resembled the prepuce covering the glans penis, and the upper and posterior part enlarged testes and scrotum. It was fourteen inches in length from the pubes; the circumference at the scrotal part, which insensibly diminished as it descended, was twelve inches and a half, and at its apex six inches. The skin of the scrotum and parts beneath was much divided by fissures, or depressed lines disposed in various directions. Upon examining the skin and pressing the scrotum, the testes could not be felt; but after a careful search they were found of their natural size, immediately below the pubes, and nearly in contact with it, as if the chord had retracted and drawn them upwards: so far as touching could determine, they were not in the least diseased. Imagining that the disease was not an enlargement of the body of the penis, the finger was passed through the opening of the prepuce, which was smooth, and covered with a sebaceous fluid, in order to find the glans: it readily admitted two fingers; they passed up their whole extent; and although the part, which was of considerable thickness, bent into many wrinkles, the fingers could not reach the end. A thick bougie was then introduced, and about nine inches high stopped. Upon squeezing the skin near the pubes, a harder body was distinctly felt, and traced to where the bougie stopped: there was no doubt, on further examination, of its being the body of the penis, not in the least altered from its proper dimensions. It reached between four and five inches from the pubes. The whole of this enormous mass of disease hung very loosely between the legs, allowing of a great extent of movement, and was so pliable as to be bent in any direction. When squeezed with the fingers, the indentations remained for about half a minute, and the parts then recovered their former situation; but this was not the case with the preputial part, for it did not shew the slightest disposition to œdema.

These, Gentlemen, are the particulars of this very curious disease,

disease, which was seen by a great number of practitioners ; and a drawing of which accompanies the description, accurately diminished by *Richter*, from a larger one in my possession taken from the subject. This will convey a much better idea of the extent and appearance of the disease than words can communicate.

I have the honour to be, Gentlemen,

New Street,
Covent Garden.

Your most obedient servant,

ROBERT BAKER.

Art. 2. *Account of an Institution for inoculating the Vaccine-pock, patronized by his Royal Highness the Duke of York. At No. 36 Warwick Street, Golden Square.*

IN the month of December last an institution was founded in London, for the purpose of further ascertaining and extending the benefits of inoculating the vaccine-pock. The grounds upon which it is hoped that this institution will meet with general encouragement are the following :

“ Those who are acquainted with only a part of the history of the small-pox, scarcely take into their contemplation more than the advantages of the *inoculated* over the *natural small-pox*, in the points of preservation of the lives of individuals, and the substitution of a disease generally slight for a disease generally severe : and such persons imagine that the practice of inoculation neither requires, nor is, perhaps, capable of farther improvement ; but those who are more extensively acquainted with the history of the small-pox know that it is productive of a great deal of mischief, notwithstanding the advantages of inoculation :—for,

“ 1. Under the best treatment a certain proportion of persons die in the inoculated small-pox ; and although the proportion of deaths to the recoveries may not exceed five out of a thousand patients, the anxiety occasioned by these

fatal cases is more severely felt than when such cases occur in the casual disease ; therefore the substitution of a milder disease will contribute to lessen the anxiety which would be thereby occasioned.

“ 2. It seems fair to calculate, that, in the inoculated small-pox, one in twenty-five patients undergo a severe disease.

“ 3. The numerous sources of the small-pox infection now preclude every prospect of extinguishing this disease.

“ 4. A certain proportion of inoculated cases of small-pox produce deformities of the skin, which no practitioner can be answerable for preventing in any instance. Diseases also are frequently excited by inoculation, to which a disposition pre-existed in the constitution.

“ 5. In particular families, and in particular states of the constitution, as in pregnancy, &c. the small-pox is an exceedingly dangerous disease, even by inoculation. Now it is manifest, from the accounts which have been collected of the disorder called by the name of the cow-pock, and particularly from the experience, by inoculation of it since January last, that the hurtful effects of the small-pox above stated may be prevented by substituting for it the inoculation of the cow-pock.—Because,

“ 1. Not a single well-attested instance has been produced among above two thousand known to have had the inoculated vaccine-pock, of the small-pox being subsequently taken. And, traditionally, this fact has been established time immemorial, with regard to the casual cow-pock.

“ 2. Of above four thousand persons who have had the inoculated cow-pock, *one* only has died. There is, however, good ground for believing that the proportional mortality will be less than here stated.

“ 3. It may safely be affirmed, that the inoculated cow-pock is generally a much slighter disease than the inoculated

lated small-pox; and that the proportion of severe cases in the latter is to the former as at least fifteen to one.

“ 4. It does not appear that the genuine vaccine-pock can be propagated like the small-pox, by effluvia from persons labouring under it; but if this disease were infectious, which is not an established fact, yet as the effluvia are as the number of pustules, the vaccine-pock must be very rarely propagated in this way. Hence if the vaccine inoculation should be universally instituted in place of the small-pox, it is reasonable to conclude, that this most loathsome and fatal malady will be extinguished, and, like the sweating sickness, plague, certain kinds of leprosy, &c. be known in this country only by name.

“ 5. It does not appear that the vaccine poison, like that of the small-pox, can be conveyed so as to produce the disease indirectly from diseased persons, by adhering to clothes, furniture, bedding, letters, &c. Hence no danger is to be apprehended of its propagation in these channels from the universal practice of the inoculation of the cow-pock.

“ 6. It has been found that a person whose constitution has distinctly undergone the vaccine disease is in future insusceptible of the same disorder. Hence no objection can be made to the new inoculation, as was once urged, on account of its being believed, that, by the commutation of the small-pox for the vaccine-pock, an eruptive disease would be introduced, to which the same person would be liable repeatedly.

“ 7. It does not appear that those who have already gone through the small-pox are susceptible of the vaccine disease, as was a little time ago believed. Hence no objection can be urged on the score of persons who have already gone through the small-pox, being liable to a new infectious disease, by the introduction of the vaccine inoculation.

“ 8. From

“ 8. From experience there is no reason to apprehend the smallest chance of deformities of the skin from the vaccine inoculation.

“ 9. The extensive practice of the vaccine inoculation in the present year, (1799,) and the accounts of the disease in the casual way, do not shew that any other disease will be excited subsequently, which is peculiarly imputable to the new practice.

“ From the above comparative statement, it is manifest that it is highly to the interest of the British public to adopt universally the inoculation of the vaccine-pock in place of the small-pox. And that the poorest ranks in society may enjoy the benefit of the new inoculation, the following plan of an institution is submitted to the consideration of benevolent persons: confiding, that when the objects are well understood, it will receive such aids as are necessary to its establishment and maintenance. It is presumed that it will be readily perceived, that perhaps no charitable institution ever promised to be productive of so much benefit at so trifling an expense.

“ The predecessors of our august Sovereign afforded a decisive proof of their wisdom and philanthropy in introducing the small-pox inoculation, not only by the encouragement which they gave to others, but by setting the example of the practice in their own family: and a most distinguished prince of the same illustrious family having previously not thought it unworthy of him to be informed by the experience of the new inoculation, among certain orders in society, to whom he graciously extends protection, has deigned to confer the honour of his patronage on the intended institution.

PLAN.

“ 1. At a house to be called the Institution for the Cow-pock or Vaccine Inoculation, a physician and a surgeon shall attend every Monday and Friday, at one o'clock, to
examine,

examine, inoculate, and prescribe for the patients; who shall attend at the institution at such times as they shall be directed by the physician and surgeon.

“ 2. An apothecary shall also attend at the same time with the physician and surgeon, to discharge the duties of his department.

“ 3. The patients admitted to receive the benefits of the institution shall be those who apply with recommendatory letters from the governors or subscribers.

“ 4. The patients shall be supplied with such medicines as are necessary at the expense of the institution, and occasionally be attended at their own houses.

“ 5. Subscribers of one guinea annually to the institution shall be entitled to a right of having two patients constantly on the books of the charity; or they shall have the same right during life, by paying ten guineas at one time. Subscribers of larger sums may have the right of having a proportionally greater number of patients constantly on the books.

“ 6. The subscribers are to be called governors; they shall possess the power of transacting all the business relating to the management of the institution in such a manner as shall be agreed upon by themselves.

“ 7. The subscriptions shall be employed to defray the expenses of the institution.

“ 8. The establishment belonging to the institution shall consist of a patron, a president, six vice-presidents, a treasurer, an auditor of accounts, and the governors, besides the necessary medical officers for carrying on the business which is the object of it.

“ 9. The medical duties are to be discharged gratuitously by two physicians, two consulting surgeons, two surgeons, and three visiting apothecaries. These officers are to be governors.

“ 10. There shall be a resident apothecary, to prepare
and

and dispense medicines, a collector or clerk, a porter, and such other officers as shall be found necessary."

MEDICAL DEPARTMENT.

Physicians, George Pearson, M.D. F.R.S. Lawrence Nihell, M.D.—*Consulting Surgeons*, T. Keate, Esq. F.R.S. John Rush, Esq.—*Surgeons*, Robert Keate, Esq. John Gunning, Esq.—*Visiting Apothecaries*, Augustus Brande, Esq. Francis Rivers, Esq. Mr. Everard Brande.

Art. 3. *Remarks on Dr. Pearson's Communication concerning the Eruptions resembling the Small-pox, which sometimes appear in the inoculated Vaccine Disease.* By the Rev. T. D. FOSBROOKE, M. A. F. A. S. Curate of Horsley, Gloucestershire.

To the Society of Physicians and Surgeons.

GENTLEMEN,

IN your Review for December 1799, p. 393 & seq. is a paper from Dr. Pearson upon the subject of "the Eruptions resembling the Small-pox which sometimes appear in the inoculated Vaccine Disease."

In p. 394 of that communication, Dr. Pearson observes, that the cause assigned by *some* for the appearance of these eruptions is combination with variolous matter. Now this cause, which Dr. P. rejects, is exactly the point for which we mean to contend, observing only, that though we are able to oppose experience equally extensive, we cannot give that demonstrative evidence which he requires, because it is not possible. Who is to unravel the subtleties by which contagion is propagated? Circumstantial evidence is, however, frequently as conclusive, often more so; and this we shall adduce.

In the first place, I shall observe, that eruptions are peculiar to small-pox, (I speak relatively,) and that these vario-
lous,

lous, or variolous-like eruptions have never been seen in the vaccine practice (of which above a thousand cases have been noted) in this neighbourhood. This of course is a reasonable ground of dissent from acquiescence to Dr. P.'s objections; and which, I presume, will be accepted as such.

In p. 394, Dr. P. observes, that these pustules, "with some slight difference, so much resembled those of the small-pox, that he should not have hesitated to consider them as belonging to this disease." Now here is an analogy, with nothing more on Dr. P.'s side of the question (and much on ours) than a slight difference. Will Dr. P. positively decide, that this slight difference destroyed their character of being variolous eruptions, and that they would not have occasioned the variolous disease? Let us hear him himself in p. 396. Others are inoculated from the matter derived from these subjects, which produces similar eruptions. In one instance occurred "the red large pimples mentioned above;"—"the reddish brown scabs," I presume, of p. 394. Dr. P. admits *his* observations to be founded upon conjecture only: we, therefore, are admitted to conjecture too. Who knows what may be the modified appearances of the small-pox and cow-pox united?

On Dr. P.'s part are variolous appearances, and an anomalous aspect from the results of the practice in this neighbourhood. Which, then, is the most probable side to take; an exception peculiar to the practice of Drs. Pearson, Woodville, and those whom they have furnished with matter; or the supposition of variolous contamination, founded on analogical appearances of the strongest kind? Dr. P.'s objection is conjecture; ours is something more: the last has a foundation to it; the former has none.

In one instance, however, occurred, p. 396, "*the genuine vaccine pustule*:"—one only instance! Fortunately, we are in possession of cases which enable us to assert, that

in some instances the vaccine will take the lead of the variolous disease.

Dr. P. very impressively asserts, that his matter was originally taken from the cow. To this we shall only reply, that medical men in particular can never have a positive certainty of the purity of their matter; and that eruptions have never appeared in the practice of this neighbourhood, either with matter from the cow, or in its progressive stages.

With regard to conclusion 1st (p. 396,) "that the vaccine poison produces a disease resembling the small-pox," &c. we shall only observe, that by the practice of this neighbourhood, in the respect to which Dr. P. alludes, it is positively denied. As to conclusion 2d, if the matter be variolated, we presume that both diseases may appear together in certain cases. Conclusion 3d. "The matter has not been seen to go back," says Dr. P. This we deny *in toto*. In this neighbourhood the variolous character of this identical matter has become almost immediately extinct. For this observation, I refer to Drs. Jenner and Woodville.

As to the "absurd name of English *variolæ vaccinae*" (p. 397,) every school-boy knows that the meaning of *variola* is *freckle* or *pimple*, and therefore that its modern and forced application to small-pox by no means destroys its original latitude of signification, and indeed real and only one; and of course, that it may be therefore allowably so used. The Latins knew nothing about small-pox, (so we are told, though I could cite *modern* presumptions to the contrary;) how, therefore, could they appropriate the term to the disease in question? As, then, *variolæ vaccinae* is not philologically erroneous, let us hear no more of "*dialecticians*," and the harsh term "*absurd*."

As to the Doctor's inferences 1, 2, 3, (p. 398,) we deny the premises, and of course reject the conclusions.

All Dr. P. has said is hypothetical : not so with respect to ourselves ; *e. g.* in the circumstance of which we solicit an explanation, *Whence is it that eruptions have never appeared in the practice of this neighbourhood ?* Till this question be resolved, we shall hesitate respecting the objections of Dr. Pearson.

Horsley, Gloucestershire.

Jan. 14, 1800.

T. D. FOSBROOKE,

Vacco-Variolist.

Art. 4. *Case of a large incised Wound in the Abdomen, with several Punctures of the Intestines, successfully treated by Mr. N. WASHBOURN, Surgeon, of Marlborough, C. M. S.*

To the Society of Physicians and Surgeons.

GENTLEMEN,

HAVING lately had the honour of sending you a case on the effects of arsenic, I herewith enclose another of an incised wound ; which, I flatter myself, will not be unacceptable for your very useful Magazine.

I remain, Gentlemen,

Marlborough,

Dec. 5, 1799.

Your most obedient servant,

N. WASHBOURN.

A PERSON received a wound in his left side, by a large pocket knife, which caused a profuse internal hæmorrhage, and a protrusion of the bowels. The wound was nearly four inches in length, and inflicted upon the part where the operation of paracentesis is usually performed. About three hours after the accident, when I first saw the patient, I found him lying on the ground, with his intestines and mesentery much exposed ; but they had been very judiciously kept warm, by applying cloths dipped in a fomentation. His pulse was scarcely perceptible, and a large quantity of coagulated blood filled the wound. I removed
the

the coagulum, and applied a ligature on the bleeding mesenteric artery. A violent sickness having at this time supervened, the bowels were forced out at the wound; and four punctures were then discovered, which would have admitted the contents of the intestines to escape. The punctures now were secured by sutures, and reduced; the external wound was also united by the interrupted suture, and dressed superficially: over all was placed a flannel bandage, wetted with a spirituous application. On putting the patient to bed, a few drops of the tincture of opium were administered; and the antiphlogistic plan of treatment was adopted for some time, until the symptoms indicated tonic remedies. In about five weeks he perfectly recovered, and is at present in good health.

As it appeared that there would have been but small hope of the patient's recovery by treating the wounded bowels in the ordinary way, I was induced to apply the interrupted suture, with thread well waxed, and cut close to the wounded intestines: and I do not see the impropriety of leaving so small a substance as thread in the cavity of the abdomen; since it must in time be destroyed and taken up by the absorbents.

The offender, who inflicted the above-mentioned wounds, being alarmed for his own safety, immediately cut himself across the *aspera arteria*: ligatures were applied to the divided parts, and he got well in a short time.

Art. 5. *An extraordinary Case of Abstinence, nearly fifteen Months in Duration*; recited by DR. SCHILVER, of Osnaburg: with an Extract from the Philosophical Transactions, upon the same Subject, by the EDITORS.

THE following fact, provided it be really such, is so novel and wonderful, that it cannot fail to attract the attention

tion of the medical world; inasmuch as it proves that, under peculiar circumstances arising from disease, life and nourishment may be continued without the assistance of food or drink, for a most astonishing length of time! This case is published in the nineteenth and twenty-sixth part of a German periodical work, entitled, *Westphälischen Beträgen zum nutzen und Vergnügen*. The person who sends an account of it signs himself D. SCHILVER, of Osnaburg.

The daughter of Mr. Rienker, of the parish of Borgloch, is sixteen years old. In the eleventh year of her age she was attacked with epilepsy, which was attributed at that time to worms. She was afterwards afflicted with a great number of nervous complaints. For a considerable time before her present indisposition she took very little nourishment. According to the account of her parents, she was generally in a constant sleep in the beginning of the disorder; at present she is almost always awake. The state in which she has been for these last eight weeks, during which time I have seen her thrice, is as follows:

She is scarcely at all emaciated, and her external appearance is quite different from that of a person in ill health; her eyes are active and lively, and the colour of her cheeks is that of a high red; her whole body is warm; the skin bears natural colour; it is soft, and exhibits slight marks of perspiration. The circulation is feverish; the pulse at the wrist scarcely to be felt. In the carotid arteries it is much more perceptible; it beats at the rate of one hundred and fifteen to one hundred and twenty-five strokes in a minute. The motion of the heart corresponds with that of the pulse. Respiration is moderate; but a sudden and yet gentle gust of air against the mouth stops it, and then the patient faints. In the night she seems to sleep. The inferior maxilla is convulsively fixed against the superior; the jaw is locked, and hence she cannot articulate distinctly. The gums and teeth are covered with black-coloured coagulated blood,

blood, which seems to flow from the scorbutic gums, they being spongy, pale, (?) and scarcely covering the roots of the teeth. It is impossible to see the tongue and palate. On trying to make her swallow some liquid nourishment, she was seized with a cough and fainting. The abdomen is a little tense. The natural evacuations, according to the report of her parents, occurred for the first four weeks, during the whole of which time she did not take any nourishment. She may be pinched and squeezed without feeling; but she still hears and sees. Except the motion of the head from side to side, the whole muscular power of the body seems to be lost; and, therefore, she is constantly in bed.

It is only necessary for any one to see the patient and the aged parents worn out by grief, whose simplicity does away all suspicion of artifice, in order to be convinced that no deception is here practised. The patient had already existed nearly a year in this state, according to the testimony of creditable witnesses, when an accident made the circumstance more generally known. Both parents and the patient entreated that the case might be scrupulously examined, so as to do away entirely any suspicion which might fall on them. A few friends to science united themselves with this intent. The six following persons, on whose fidelity, care, and watchfulness, every dependance might be placed, were selected to attend the trial: Frederic Reden and John Hartmann, from Osnaburg; Job Weschmeier and Casper Semmelman, from Melle; John Schaefer and Francis Borgholt, from Iberg. These men were sworn at Iberg on the 13th of May, to attend to the following particulars: They swore to watch the patient fourteen days without quitting her, each watching three hours in the twenty-four hours. They were to take notice of every thing which was offered to her. They were not to permit her mother to sleep with her, or even to approach too near her bed. They were to

to observe every thing which related to the patient; and after the termination of the fourteen days, their testimony was to be received on oath as to the manner they had fulfilled their instructions. At the same time Mr. Heelman, a merchant of Borgloch, was appointed to inspect the whole proceeding, and see that these instructions were duly complied with.

These men appeared on the 25th. of May before the magistracy of Iberg, and deponed on oath that they had obeyed their instructions in every particular. During the whole fourteen days the patient had neither eaten nor drank any thing. They themselves had frequently invited her to eat, but she never shewed the smallest inclination, nor did she appear to be able to do so. They observed a bloody matter flow frequently from her mouth, and this event was always accompanied with cough. Her sleep was irregular. She seldom slept more than two hours in the night. At times, when she seemed to be better, she spoke a good deal; but her voice was always low. She saw and heard distinctly, and answered any question which was put to her. They observed that she was frequently convulsed, during which her colour changed. When she appeared well, her respiration was natural. She lay almost always on her back. She could not move any part except her head. She never complained of any pain. The faculties of her mind were unimpaired. She was attentive to every thing around her. She had a strong memory. She could not bear the least want of air; and shutting the windows rendered her uneasy.—Here this account ends.

Some other very remarkable instances of abstinence are recorded in the Philosophical Transactions, in the Edinburgh Medical Essays, in the Memoirs of the Manchester Society, in the Posthumous Works of Mons. Pouteau, in Stalpart Vander Wiel's Observations, in the Memoirs of the Academy of Sciences, in the Medical Communica-

tions, &c. &c.; but we do not recollect that any of them extended to half so long a period as that which is above related. The following account, however, of an *Affidavit made in Scotland, at a Court of the Barony of Erroll, holden at Erroll, upon the 26th Day of December 1719*, communicated to the Royal Society by PATRICK BLAIR, M.D. F.R.S. No. 364. p. 28. is still more singular and incredible:

Gilbert Jackson, about fifteen years of age, fell sick February 3, 1716. He had several different attacks of fever between that time and the 10th of June, when he became dumb, lost his appetite entirely, and the use of his limbs. He remained without eating or drinking any thing whatever, and recovered of his fever upon the 17th day of May 1717; “but continued still dumb,” the affidavit states, “without eating or drinking, or having the use of his limbs, till the 10th day of June the said year, when he was again seized with an extraordinary fever, and the next day recovered his speech, but continued in the fever, without eating or drinking any thing at all, or having the use of any of his limbs, till the 11th day of November following; when he recovered his health pretty well, and the strength of one of his legs. And thus he continued without eating or drinking, only washed his mouth sometimes with water; and always, when he saw the rest of the family going to take any kind of food, the sight of it being altogether uneasy to him, he retired. Upon the 10th day of June, 1718 year, he fell in a fever again, which continued till the beginning of September thereafter, when he recovered of the said fever, though he never could be induced to take any kind of meat or drink; and thus he continued in pretty good health, and fresh-coloured, till the 9th day of June 1719, when he was seized again with a severe fever; and upon the 10th at night, his father pressed him extremely to take a little milk boiled with oatmeal, which

at length he agreed to; and he took a spoonful of it, which stuck so long in his throat, that his parents thought he had been choaked; and ever since he has taken a little food, but so very little, that a halfpenny-loaf serves him eight days. That all the time he fasted, he never had any evacuation either by stool or urine; and it was fourteen or fifteen days after he began to eat, that he got any benefit that way; and that he is now in pretty good health, but still wants the use of one of his limbs. And this is the truth, as we shall answer to God. James Jackson; Elizabeth Bell; Charles Brown, *Baily*; Gilbert Anthone, *Clerk*."

K. U.

Art. 6. *Monthly Catalogue of new and intended Publications:*

NEW BRITISH PUBLICATIONS.

1. **O**F the Imagination, as a Cause and as a Cure of Disorders of the Body; exemplified by fictitious Tractors, and epidemical Convulsions. Read to the Literary and Philosophical Society of Bath. By JOHN HAYGARTH, M.D. F.R.S. Lond. & Edin. &c. 8vo. pp. 43. London, Cadell and Davies. 1800. Price 1s.

2. Essays on the Venereal Disease and its concomitant Affections. *Part the Second*; containing additional Evidence, with critical and practical Remarks, on the new saline antisyphilitic Remedies; and an Answer to some Objections made against the former Part. By WILLIAM BLAIR, A.M. F.M.S. Surgeon of the Lock Hospital and Asylum, and of the Finsbury Dispensary, &c. 8vo. pp. 352. London, Symonds. 1800. Price 6s. boards,

3. The Clinical Guide. Part II. Containing the History, Nature, and Treatment of such local Diseases as form the Object of Surgery: to which is added a surgical Pharmacopœia. By WILLIAM NISBET, M.D. &c. 12mo. Edinburgh. 1799. Price 5s. 6d.

4. Some few Cases and Observations on the Treatment of Fistula in Ano, Hæmorrhage, Mortification, the Venereal Disease, and Strictures of the Urethra. By JOHN ANDREE, M.D. Member of the Corporation of Surgeons of London, &c. 8vo. pp. 47. London, Nicol. Price 1s. 6d.

5. Some Observations on the bilious Fever of 1797, 1798, and 1799. By RICHARD PEARSON, M.D. Physician to the General Hospital near Birmingham, and Member of the London College of Physicians, 8vo. pp. 30. London, Seeley. 1799.

6. A new System of Fire and planetary Life. By Dr. HARRINGTON. London, Cadell. Price 2s. 6d.

7. A general View of the Nature and Objects of Chymistry, and of its Application to Arts and Manufactures. By W. HENRY, Member of the Royal Medical and Natural History Societies of Edinburgh, &c. &c. London, Johnson. Price 1s. 6d.

8. The Anatomist's Vade-Mecum: containing the Anatomy and Physiology of the human Body. The second Edition, revised and enlarged. By ROBERT HOOPER, of Pembroke College, Oxford, M.D. F.L.S. &c. 12mo. London, Murray and Highley. 1800. Price 3s. 6d.

9. A Translation of the Table of chemical Nomenclature. Prepared by De Morveau, Lavoisier, Berthollet, and De Fourcroy; with Explanations, Additions, and Alterations; with seven sheet folio tables, &c. By GEORGE PEARSON, M.D. F.R.S. &c. 4to. London, Johnson. Price 14s.

10. A Collection of Passion Flowers. Etched and coloured by Miss LAWRENCE. No. I. containing three Plates. London, White. Price 10s. 6d.

11. An Inquiry into the Symptoms and Causes of the Syncope Anginosa, commonly called Angina Pectoris. Illustrated by Dissections. By CALEB HILLIER PARRY, M.D. Member of the College of Physicians of London,
and

and of the Royal Medical Society of Edinburgh, and one of the Physicians of the Bath General Hospital. 8vo. London, Cadell and Davies. Price 4s.

12. A short Account of the infectious malignant Fever, as it appeared at Uxbridge and its Vicinity, in the Summer and Autumn of the Year 1799; with a Detail of the good Effects of Yeast and vital Air in the different Stages of that Disorder. By a MEDICAL PRACTITIONER. 8vo. London, Cox. Price 1s. 6d.

13. Philosophical Transactions of the Royal Society of London for the Year 1799. Part II. 4to. London, Elmsly. Price 15s.

14. Dr. MOSELEY's Treatise on Sugar; with miscellaneous medical Observations, and considerable Additions. Second Edition. 8vo. pp. 276. London, Robinsons. Price 6s. 6d.

15. An Essay on the Preservation of shipwrecked Mariners, in Answer to the Prize-question proposed by the Royal Humane Society. By A. FOTHERGILL, M.D. F.R.S. &c. 8vo. pp. 61. London, Johnson. Price 2s. 6d.

16. A System of Dissections. Part V. (which completes the first Volume): containing Dissections of the back Part of the Thigh, of the Leg, and Foot; with plates. By CHARLES BELL, Surgeon. Folio. Edinburgh, Mundell. 1799. Price 5s. 6d. each Part.

17. A new System of Mineralogy, in the Form of a Catalogue, after the Manner of Baron Born's systematic Catalogue of the Collection of Fossils of Mademoiselle Eleonore de Raab. By WILLIAM BABINGTON, M.D. Assistant Physician and Lecturer in Chymistry, at Guy's Hospital. 4to. pp. 279. and Index. London, Phillips. 1799. Price 15s. boards.

18. Directions for administering Peruvian Bark in a fermenting State, in Fever and other Diseases in which Peruvian Bark is proper; and more especially in such Cases as the usual Formulæ of the Bark are rejected by the Stomach.

mach, or nauseated by the Sick: with some Experiments to ferment the Peruvian Bark with different Sweets. By R. ROBERTSON, M. D. Greenwich. Octavo, pp. 14. London, 1799.

19. A Letter to the Right Hon. Lloyd Lord Kenyon, relative to some Conduct of the College of Physicians of London, posterior to the Decision of the Court of King's Bench in the Case of Dr. Stanger: and containing Observations on a principal Ground of that Decision. By WILLIAM CHARLES WELLS, M. D. F. R. S. 8vo, pp. 136. London, 1799.

20. A few practical Remarks on the medicinal Effects of Wine and Spirits: with Observations on the Economy of Health; intended principally for the Use of Parents, Guardians, and others entrusted with the Care of Youth. By WILLIAM SANDFORD, Surgeon to the Worcester Infirmary. 12mo. London, Cadell and Davies. Price 2s. 6d.

21. Observations on the Cure of the Curved Spine, in which the Effect of mechanical Assistance is considered. An Essay on the Means of lessening the Effects of Fire on the human Body. By JAMES EARLE, Esq. F. R. S. Surgeon extraordinary to the King, and to his Majesty's Household, and senior Surgeon to St. Bartholomew's Hospital. 8vo. London, Johnson. Price 4s.

22. An Essay concerning the outward and salutary Application of Oils on the human Body. By the Rev. W. M. TRINDER, M. D. 8vo. London, Longman and Rees, Price 1s.

23. Tracts on the Nature of Animals and Vegetables, by LAZZARO SPALLANZANI, R. P. U. P. 8vo. pp. 394. Edinburgh, CREECH. 1799. Price 7s.

24. An Essay to elucidate the Nature, Origin, and Connection, of Scrophula and Glandular Consumption; including a brief History of the Effects of Ilkey Spaw; with Ob-

Observations on the medicinal Powers of the *Digitalis*; and Strictures on the Opinions of Dr. Lettsom, relative to the Virtues of that Plant. By GEORGE MOSSMAN, M. D. 8vo. pp. 108. Johnson, London. 1800. Price 2s. 6d.

NEW FOREIGN PUBLICATIONS.

25. De Penitiori Ossium Commentarius. Auctore ANTONIO SCARPA, in Ticinensi Gymnasio Anatomes et Chirurgiæ clinicæ Professore, &c. Lipsiæ, sumptibus J. F. Hartnoch, 1799. 4to. pp. 55. Imported by Escher, London.

26. ALEXANDRI KOLPIN, S. R. M. Dan. et Norv. Consilarii Justitiæ, Chirurgi Aulæ Regiæ, in Academia Chirurgorum Regia Professoris, Nosocomii Fridericiani Directoris, Academiæ Scientiarum Regiæ Holmiensis cet. Membri, Opuscula Chirurgica. Tomus I. cum tabula ænea. Havniæ, 1799. 8vo. pp. 176.

27. CHR. FRIIS ROTTBOLL'S Descriptiones Plantarum quarundam Surinamensium, cum Fragmento Materiæ Medicæ et Œconomix Surinamensis, cum figuris æneis, has undergone a second edition, with additions.

28. Annales Instituti Medico-Clinici Wirceburgensis: Redegit & Observationibus illustravit J. N. THOMANN, M.D. &c. vol. i. cum v. figuris æri incisis. lxxviii. & pp. 229. Wirceburgi apud A.M. Köl. 1799.

29. Ericorum Icones et Descriptiones, Auctore JOHANNE CHRISTOPHORO WENDLAND, Fascicul. III. Abbildung und Beschreibung der Heiden. The three first Numbers, 4to. Hanover, Hahn. 1798 and 1799. Price 7 *rix-doll.* or about 1*l.* 8s.

30. Pharmacopœia Borussica. 4to. pp. 223. 1799. Berlin, Decker.

31. SAM. THOM. SOEMMERING Icones Embryonum humanorum. Royal Folio. pp. 10. 1799. Frankfurt on the Maine, Varrentrapp and Venner. Price 6 *rix-doll.* or 1*l.* 4s.

32. Filicum Genera et Species recentiori Methodo accommodatæ

commodatæ analyticè descriptæ, a JOANNE HEDWIG, M.D. ac Professore Botanices, &c. Iconibus ad Naturam pictis illustratæ, a ROMANO ADOLPHO, Filio, Phil. et Med. Doct. Folio. Five sheets and a half text, and six coloured plates. 1799. Leipzig, Schäfer. Price 3 *rix-doll.* or about 12s.

33. Mémoire de la Société d'Histoire Naturelle de Paris. 1 vol. in-4. A Paris, chez Bandouin. Prix 6 *fr.*

34. Histoire Naturelle, Générale, et Particulière, par LECLERC DE BUFFON; nouvelle Edition, accompagnée de Notes, et dans laquelle les Supplémens sont insérés dans le premier Texte à la Place qui leur convient. L'on y a ajouté l'Histoire Naturelle des Quadrupèdes et des Oiseaux découverts depuis la Mort de Buffon, celles des Reptilles, des Poissons, des Insectes, et des Vers; enfin, l'Histoire des Plantes dont ce grand Naturaliste n'a pas eu le Temps de s'occuper. Ouvrage formant un Cours complet d'Histoire Naturelle, rédigé par C. S. SONNINI, Membre de plusieurs Sociétés savantes. Soixante volumes grand in-8, beau papier, avec environ 1300 planches.

35. Dictionnaire de Chirurgie de l'Encyclopédie, par Ordre de Matières; par les C. C. DELAROCHE et PETIT RADEL. 3 vol. in 4to. dont un de planches. A Paris. Prix 54 *francs.*

36. Tableaux comparatifs de l'Anatomie des Animaux domestiques les plus essentiels à l'Agriculture, tels que le Cheval, l'Ané, le Mulet, le Bœuf, le Cochon, le Chien et le Chat, rangés sur un Plan uniforme de Classification propre à en faciliter l'Etude aux Commençans. Par J. GIRARD, Professeur d'Anatomie à l'Ecole vétérinaire d'Alfort. A Paris, in.8vo. Prix 3 *francs.*

37. C. Michel Boëhrer, M. D. of Paris, is translating into the French language Professor FRANK's Treatise on the best Method of rearing Children.

38. A third edition has been published in Paris of Cit. BOURGELAT's Elemens de l'Art vétérinaire: *Precis anatomique*

mique du Corps du Cheval, comparé avec celui du Bœuf et du Mouton. 2 vols. in 8vo.

39. Cit. LE GRANGE, professor of the Polytechnic School, is publishing a Manual of a Course of Chymistry, in 2 vols. with 14 plates.

40. Rapport sur le Cow-pox, ou Petite-vérole des Vaches, et sur les Avantages qu'il y auroit à la substituer à la Petite-vérole ordinaire; par WOODVILLE, D. M. Médecin de l'Hôpital des Inoculés à Londres: traduit de l'Anglais, augmenté de Notes, et d'un Précis historique des Experiences faites sur cette Maladie; par AUBERT, D. M. Prix 2 francs 50 cents. Paris, Gabon.

41. Les Merveilles du Corps humain, ou Notions familières d'Anatomie, à l'Usage des Enfans et des Adolescents, par L. F. JAUFFRET. A Paris, chez A. J. Dugour et Durand. 1 vol. in-16.

42. Histoire Naturelle abrégée du Ciel, de l'Air, et de la Terre, ou Notion de Physique générale, contenant ce qu'il n'est pas permis d'ignorer sur le Systême du Monde, les Astres, l'Air, l'Eau, le Feu, et la Lumière; l'Electricité et le Magnétisme; les Météores, la Géographie physique de l'Air, et les Opinions des Philosophes et des Savans sur sa Formation; Ouvrage mis à la Portée des Gens du Monde, et Traité d'après l'Etat actuel des Connoissances, avec onze Planches, dont une Carte du Ciel, par PHILIBERT. A Paris, chez Debure. 1 vol. in-8.

43. Histoire Naturelle de la Montagne de St. Pierre de Maestricht, par B. FAUJAS-SAINT-FOND, Administrateur et Professeur de Géologie au Muséum National d'Histoire Naturelle de Paris. Troisième livraison; à Paris, chez H. J. Jansen.

44. Leçons d'Histoire Naturelle sur les Mœurs et l'Industrie des Animaux, pour servir de Suite aux Leçons élémentaires d'Histoire Naturelle, à l'Usage des Enfans et des jeunes Gens. Par L. COTTE, l'un des Conservateurs de la
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Bibliothèque Nationale du Panthéon, &c. 2 vol. in-12.
A Paris, chez H. Barbon. Prix 4 *francs*.

45. Chimie optomatique, ou l'Art d'apprendre facilement cette Science, en aidant le Discours de Tableaux de Figures et de Caractères symboliques, afin de mieux saisir, par la Vue, les Rapports de la Composition et de la Décomposition des Corps, par F. G. COURREJOLLES. Livre première.—Minéraux. A Paris, chez l'Auteur.

46. Recherches et Observations sur le Traitement moral des Alienés, par P. H. PINEL, Médecin en chef de l'Hospice National de la Salpêtrière, et Professeur de l'Ecole de Médecine. 1 vol. in-8.

47. Nouveau Système de l'Univers, ou Abrégé philosophique de la Physique et de la Chimie, avec de nouvelles Découvertes de l'Auteur, un Coup-d'œil sur les Rapports de ces deux Sciences avec les autres, et leurs Applications aux Arts en grand ; par CHARLES LEOPOLD MATHIEU, de Nancy, Professeur de Physique et de Chimie à l'Ecole centrale du Département de la Corrèze, &c. A Paris, chez Janet. 1 vol. in-8.

48. Plantes grasses de P. J. REDOUTE', Peintre du Muséum National d'Histoire naturelle ; décrites par A. P. DECANDOLLE, Membre de la Société des Sciences Naturelles de Genève. Troisième et quatrième livraison.

49. Discours d'Ouverture et de Clôture du Cours d'Histoire Naturelle donné dans la Muséum National d'Histoire Naturelle, l'An VII de la République, et Tableaux méthodiques des Mammifères et des Oiseaux, par le Citoyen LACEPEDE, de l'Institut National de France. A Paris, chez Plassan. 1 vol. in-4.

50. Bibliothèque Germanique Medico-chirurgicale, par BREW, à Paris. 8vo.

51. Bulletin des Sciences par la Société Philomatique de Paris. 4to.—This journal is continued every month.

52. Lettre du D. William Kentish, Neveu de Smellie,

au

au Citoyen Baudeloque, sur quelques Passages de son *Traité d'Accouchement*. A Paris, chez Maradin. 1 vol. in-8.

53. *Introduction à l'Etude de la Botanique*, Ouvrage orné de dix Planches coloriées, contenant un Discours sur l'Accord des Sciences naturelles ; ou *Traité complet et comparé des Organes des Plantes et des Fonctions de ces Organes à toutes les Epoques de leur Vie*, dans lequel les Termes d'Usage en Botanique sont appliqués et expliqués ; une Exposition particulière des Organes des Plantes connues sous le Nom de Cryptogames ; les Principes de l'Art de décrire d'après Linné ; les Détails sur l'Habitation des Plantes, leurs Vertus, leurs Usages, leur Culture, et la Manière de les arranger et de conserver en Herbar ; l'Exposition des Méthodes générales de Tournefort, de Linné, Jussieu, et des Méthodes particulières des Fougères de Smith, des Mousses de Hedwig et de Bridel, des Champignons de Bulliard, &c. avec des Tables qui donnent à cet Ouvrage la Commodité d'un Dictionnaire, par C. J. PHILIBERT. 2 vol. in-8. A Paris, chez Debure. Il y aura un troisième volume.

54. *Beschreibung merkwürdiger Höhlen*.—A Description of remarkable Caverns ; a Contribution to the Physical History of the Earth. By Dr. ROSEMULLER and Dr. TILLESIIUS. 8vo. xvi. and pp. 224. with ten plates. Leipzig, Breitkopf and Hartel. Price 3 *rix-doll.* or 12s.

55. *Bacon Von Verulam über die Lebensverlängerung*.—Bacon of Verulam on the Prolongation of Life. Translated and illustrated with Remarks, by C. A. STRUVE, M.D. 8vo. pp. 264. Glogau, Günther. 1799. Price 16 *grosch*, or 2s. 8d.

56. *Botanisches Taschenbuch für die Anfänger dieser Wissenschaft, und der Apotheker-kunst, auf das Jahr, 1799*.—A Botanical Pocket-book, for the Use of the Student of this Science, as well as of Pharmacy, for the Year

Year 1799. By D. H. HOPPE. 8vo. pp. 225. Regensburg, Montag and Weiss. Price 21 *grosch*, or about 3*s.* 6*d.*

57. Versuch über die Kunst Scheintodte zu beleben, &c.—An Essay on the Art of reanimating Persons apparently dead; and on the Means of Relief in sudden Danger of Death. A Pocket-book in the Form of Tables. By CHRISTIAN AUGUST STRUVE, M.D. 8vo. pp. 150, exclusive of the Dedication, Preface, and Contents. Hanover, Hahn.

58. Magazin für gemeinnützige Arzneykunde, &c.—The Magazine devoted to medical Subjects of general Utility, and medical Police. Edited by J. H. RAHN, Member of the Helvetic Republican Senate, No. I. 11½ sheets 8vo. Zurich, Orell, Fussli and Co. 1799. Price 12 *grosch*, or 2*s.*

59. Vorschläge zur Verbesserung der Hospitäler, &c.—Suggestions for the Improvement of Hospitals and other charitable Institutions. By WILLIAM BLIZARD, F.R.S. and F.A.S. Translated, with Additions respecting the Hospitals and medical Schools of London, Edinburgh, Bath, and Vienna, by Dr. I. A. ALBERS, Physician at Bremen. 8vo. pp. 128. Jena, in the Academical Shop. 1799.

60. Chemische Briefe an Frauenzimmer, &c.—Chemical Letters addressed to Ladies; in which the principal Subjects of Chemistry are explained in a popular Manner; their Application to Economy, the Arts, and amusing Experiments are pointed out, and Instructions given for arranging and establishing a Laboratory. Two volumes, 8vo. with plates. Leipzig, Meyer. 1779. Price 4 *rix-doll.* 20 *grosch*, or about 1*8s.* Brit. curr.

61. Kurze Darstellung, &c.—A Concise View of the chemical Inquiries into the different Gases. By Dr. A. N. SCHERER, &c. 8vo. Leipzig, Meyer. 1779. Price 6 *grosch*, or 1*s.*

62. Kleine

62. *Kleine Mineralogische Schriften.*—Concise Essays on Subjects of Mineralogy. By J. C. W. VOIGT, Counsellor of Mines. 8vo. Part I. with a plate. Leipzig, Meyer. 1779. Price 20 *grosch*, or about 3s. 2d.

63. *Unterricht für Aeltern, &c.*—Instructions for Parents, respecting the dietetic Treatment of Infants at the Breast. By J. F. ZUCKERT. Fourth Edition, enlarged and edited by Dr. L. FORMEY. 8vo. Berlin, Mylius. Price 8 *grosch*, or 1s. 4d.

64. *Umriss des Zustandes, &c.*—A Sketch of the State of Surgery among the ancient Romans, especially in the Time of Celsus; compared with, and applied to, modern Surgery. By J. C. JÆGER; with a Preface by the Aulic Counsellor and Prof. GRUNER. 8vo. Frankfurt, Jæger. Price 20 *grosch*, or about 3s. 4d.

65. I. V. ROTHE *Handbuch der medicinischen Litteratur.*—A Manual of medical Literature. 8vo. pp. 664. Imported by Escher. Leipzig. 1799. Price 13s. 6d.

66. *Physiologie philosophisch bearbeitet.*—Physiology arranged upon philosophic Principles. By CHA. CHR. ERHARD SCHMID, Professor of Divinity at Jena. Vol. I. 1798. xxxiv. and pp. 362. Vol. II. 1799. viii. and pp. 670. 8vo. Jena, in the University Shop. Price 2 *rix-doll.* 18 *grosch*, or 11s. in sheets.

67. *Handbuch der theoretischen und praktischen Chemie.*—A Manual of the Theory and Practice of Chymistry. By J. F. A. GOETTLING, Prof. in the University of Jena, and Member of several learned Societies. Two volumes. 8vo. together pp. 1089. Jena, in the University Shop. 1799. Price 3 *rix-doll.* 4 *grosch*, or about 13s.

68. *Die neuesten Entdeckungen, &c.*—The latest Discoveries and Illustrations in Medicine, systematically arranged. By F. L. AUGUSTIN, M.D. Physician at Berlin, &c. Vol. I. for 1798. 8vo. pp. 564. Berlin, Felisch. 1799. Price 1 *rix-doll.* 12 *grosch*, or about 6s.

69. System der Chirurgie.—A System of Surgery. By ARNEMANN; with plates. Part I. Sect. I. 8vo. pp. 336. Göttingen, Vandenhök and Ruprecht. Price 1 *rix-doll.* or 4s.

70. Unterricht in der Wundarzneykunst, &c.—Instructions in the Art of Surgery, composed for the Use of academical Lectures. By METZGER. 8vo. pp. 472. Königsberg, Hartung. Price 1 *rix-doll.* 6 *grosch.* or 5s.

71. Annotazioni Medico-Practiche sulle diverse Malattie trattate nella Clinica medica di Pavia. Del DOTT. VALERIANO LUIGI BRERA. Parte prima. Folio. pp. 40. Pavia. 1799. Imported by Escher. Price 18s.

INTENDED PUBLICATIONS:

72. Mr. MACARTNEY, Surgeon, of London, has in forwardness a small treatise upon the human muscles, which will contain, in addition to the anatomical description, a tabular view of the most important complicated actions of those parts. It is particularly calculated for students in surgery and painting.

73. Mr. MACARTNEY also intends to give a Translation, accompanied with notes, of a System of Anatomy, which is at present publishing on the Continent, by Professor Scæmmering of Mayence.

74. Part I. of Practical Facts and Observations on the Use of Oxygen or vital Air, &c. by D. HILL, Surgeon, London, will soon be ready for the press.

75. Speedily will be published at Paris, Dr. DAVID'S "Dissertation sur ce qu'il convient faire pour augmenter, diminuer, ou supprimer le Lait des Femmes," which obtained the prize of the Haerlem Society.

* * * The Engraving of an extraordinary Disease of the Penis is to face p. 473.

THE
LONDON MEDICAL REVIEW
AND
MAGAZINE.

VOL. II. N° XII. FEBRUARY MDCCC.

ANALYSIS OF BOOKS.

ART. I. *Some Observations on the bilious Fevers of 1797, 1798, and 1799.* By RICHARD PEARSON, M. D. Physician to the general Hospital near Birmingham, and Member of the London College of Physicians. Octavo. pp. 30. SEELEY, London. Price 1s.

DR. Pearson here offers such facts relative to the history and treatment of this contagious epidemic as his experience has hitherto furnished. They are but the prelude of a more complete set of observations which he is in hopes to communicate hereafter. The fever here described commonly appeared under the form of a *remittent*; sometimes, however, it was of a continued type, even from the first; and in most instances it was more or less so during its height. In its mildest degrees, and as the patient advanced towards recovery, its form was *intermittent*. It answered to the following description:

“ A person (sometimes after a slight indisposition which
VOL. II. N° XII. N N passes

passes for a cold, sometimes without any previous ailment) is seized with chilliness and shivering, which, after an hour or two, are succeeded by a great heat and burning over the whole surface of the body, accompanied by a quick pulse, head-ach, and flushing of the face. This hot fit continues for several hours, during which the patient vomits up a thick, slimy, yellow or green fluid, which has a bitter taste. After this evacuation of the stomach, the head-ach and fever abate, but only for a short time; for in about twelve hours (more or less) from the first cold fit, another rigor comes on, or at least a diminution of the external heat, with hurry and confusion of spirits, and a sense of terror and distress; followed, like the former, by an evolution of heat, and by a more violent head-ach and sickness. If the first seizure happened about noon, this second paroxysm comes on at midnight, or at one or two o'clock in the morning. A moisture, either partial or general, now breaks out upon the skin, the previous restlessness abates, and the patient is inclined to doze; sometimes, however, he continues wakeful. In the course of a few hours he feels relieved, relishes his breakfast tolerably well, and is able to sit up. He has no head-ach, but only a giddiness and noise in the ears, with languor and weakness, or universal soreness of the limbs. The skin, however, is still hot and harsh, the tongue white, and generally there is very considerable (sometimes excessive) thirst. The tunica albuginea of the eyes is more or less tinged with yellow. The urine has a natural appearance. The evacuations by stool are yellow, and more or less liquid or pulpy. A bleeding from the nose sometimes happens in young subjects. Towards the afternoon, the patient's sensations become very uneasy; in the evening there is a manifest exacerbation of fever, with great restlessness, and in the course of the night more or less delirium.

“ To this succeed, as before, in the course of the morning, some partial perspiration, or some evacuation by stool or urine, with an abatement or cessation of head-ach, and a tendency (but not always) to dozing. The skin is still hot; the pulse sometimes quick, sometimes languid; the tongue (which at first was only white) is now covered with a dirty white or yellowish mucus, and there is a clamminess and bitter taste in the mouth. In addition to these symptoms, the patient complains of a soreness at the pit of the stomach, and frequently of sharp colicky pains in the lower part of the abdomen. Sometimes there is a dry irritated cough.

“ After this period (unless the fever is checked by the timely application of medicines, or by spontaneous evacuations from the stomach, intestines, and skin) the paroxysms become less distinct, and the exacerbations in the evening and during the night more violent, with increased anxiety and restlessness. There is a manifest determination to the head, with a flushed, and often turgid countenance, eyes keen and glistening, delirium more constant, and sometimes of the phrenitic kind, and great sensibility of stomach, which often rejects both food and medicine. Thus is passed the night. In the morning, or about noon, the patient is seized with an apprehension of dying, accompanied by spasms or deliquium. In women these attacks resemble hysteria; in children and young persons they often resemble a fit of epilepsy. This obscure kind of cold paroxysm is, like the genuine rigor, followed by heat, head-ach, restlessness, vomiting, &c.

“ If the fever does not terminate in recovery or death before the eleventh or fourteenth day, it proceeds to its second stage, in which its remissions are scarcely observable. In this stage the patient is low, weak, and desponding; or drowsy, deaf, and stupid. In some cases there is, on the contrary, an increased degree of sensibility,

with great restlessness. The tongue is more foul and less moist; the skin hot, dry, and harsh; the pulse small and frequent. Sometimes costiveness, but more commonly a diarrhœa. Often there is a dry, irritated cough; at other times a troublesome afflux and accumulation of viscid phlegm in the trachea and about the fauces. Aphthæ and ulcerations frequently appear on the edges of the tongue. In many instances the abdomen is considerably distended, and sore upon pressure. Strangury (where no blisters were applied) and a suppression of urine, occurred in some cases. In the worst forms of the fever there is incessant vomiting with hiccup. This stage of the fever is commonly protracted to five, six, or eight weeks, and even longer, in case of relapses, which often happen. In the course of this stage, many sink under debility and exhaustion, especially if there be profuse diarrhœa or dysentery, or considerable hæmorrhage; others die of suffocation, in consequence of mucus accumulated in the bronchia and trachea; others in a more lingering manner, in consequence of suppurative and gangrenous inflammation in the lungs, liver, or intestines. In young persons, this fever sometimes ends in hydrocephalus. In subjects predisposed to phthisis, it terminates in hectic.

“ When the termination is favourable, and as the patient advances in recovery, the fever, which had been continued at its height, has evident remissions, and at length intermits, putting on a tertian type. During this period the patient often complains of restless nights, is generally teased with an irritated cough, sometimes with griping pains in the bowels, sometimes with an hæmorrhoidal affection, and sharp pains about the os sacrum, and not unfrequently with profuse nocturnal perspirations. The stomach and bowels become easily disordered by food taken in too great quantity, or of an improper quality; hence from this cause, as well as from exposure to cold, bodily fatigue, or

uneasiness of mind, relapses are common, and occur more than once in the same individual.

“Such are the most prevailing phenomena of this fever.”

Dr. Pearson very justly remarks, “if it were generally of a more regular and continued type, it might be referred to the *Synochus* of some nosologists; and, according to its various modifications, might be distinguished into *Synochus gastritica*, when accompanied with gastritis; *Synochus cholericæ*, when accompanied with cholera; *Synochus dysenterica*, when accompanied with dysentery; *Synochus pneumonica*, when accompanied with inflammation of the lungs, &c.”

In the treatment of this fever, the author generally found it necessary to take away blood from the arm before the fourth or fifth day, and to repeat it in those cases where pneumonic or rheumatic pains were violent, and also in plethoric patients. In aged persons and children, bleeding was dispensed with. Emetics and cathartics, Dr. Pearson often found sufficient of themselves, for removing the fever under its milder forms, and particularly in the case of infants.

“Tartarised antimony, joined with ipecacuanha, and given in a full vomiting dose, seems to answer better than the solution of the antimonial salt, administered in divided and frequently repeated portions. Of all purgatives, calomel and the neutral salts (aided by plentiful dilution) are best adapted to these cases. The former (viz. calomel) should be prescribed at first in powerful quantities; as it is a main step towards the cure, to evacuate the bowels briskly and freely in the beginning. Afterwards, this mercurial preparation should be occasionally repeated in smaller doses. To abate thirst, and promote the fluid excretions from the body by the skin and kidneys, the common combinations of the alkaline salts with the vegetable acid may be employed. During the first two days, while the principal

indication (next to bleeding) is to bring away the bilious contents of the stomach and intestinal canal, the combination of the vegetable fixed alkali with the before-mentioned acid, generally answers best, and the more so as it promotes the urinary evacuation; but when this object, the cleansing of the first passages, has been accomplished, and another indication arises, viz. the promoting of the cutaneous discharge, then the combination of the volatile alkali with vinegar, is a more suitable medicine. To this may be added, a due proportion of antimonial wine, or of the vinous infusion of ipecacuanha.

“ This mode of treatment is to be persisted in more or less, according to its effects, during the first four, five, or six days, interposing an opiate joined with an antimonial, and applying a blister, as occasion may require. Of opiates, however, it is to be noticed, that they very rarely agree during the first stage of this fever, and that when they are required, in consequence of spasms, colicky pains, or profuse diarrhœa, they are best administered in glysters. Before the seventh or eighth day, they seldom fail to increase the restlessness and disturbance of the head; but after that period they may in most instances be employed with good effect. It is with blisters as with opiates, they do not succeed well during the first week, excepting those cases in which drowsy and lethargic symptoms come on as early as the fifth or sixth day. At whatever period these symptoms appear, blisters are of admirable use, especially if due evacuations have been previously made. Their application should be renewed after a few days, or the blistered parts should be kept constantly open, as their good effects depend upon the discharge of serum, and the inflammation and ulceration produced on the surface.”

Among other remedies, the author found great benefit arise from the use of glysters of vinegar and water, or chamomile

momile tea, with or without an opiate, when colicky pains or spasms, and vomitings, were violent; and pediluvia when the head was much affected. The Peruvian bark invariably disagreed until the fever was reduced by other remedies to a true tertian, or until it had fairly spent itself: much benefit was experienced from columbo root, infusion of Angustura bark, and other bitters, during the remissions, joined with vitriolated kali or soda: in some cases myrrh and soda, given in a state of solution, answered better than columbo. Tone being restored by these means to the stomach and intestinal canal, the appetite, strength, and spirits, daily improved; and the cure was perfected by the assistance of fresh air, exercise, &c. C.

ART. II. *A short Account of the infectious malignant Fever, as it appeared at Uxbridge, and its Vicinity, in the Summer and Autumn of the Year 1799; with a Detail of the good Effects of Yeast, and vital Air, in the different Stages of that Disorder.* By a MEDICAL PRACTITIONER. Octavo. pp. 50. Cox, London. 1799. Price 1s. 6d. |

THE author of this very interesting account professes to have “related facts as they occurred, without having recourse to any theoretical reasoning.” He states that a low infectious fever, of an alarming nature, appeared in Uxbridge and its vicinity about the middle of last summer, and has continued its ravages until the present time (Dec. 1799.) This fever “shewed itself first in a quarter of the town where wretchedness and misery found their abode. As it advanced to the habitations of more decent people, its symptoms were considerably mitigated; and by the time it got into the heart of the town, where the affluent and respectable reside, it had so far lost its malignant influence, that it was seldom observed, except as a topical affection

among adults, or a scarlet efflorescence on their children.” The first subject visited by our author in this disease was a girl, sixteen years of age, residing in a dirty and miserable hut, situated upon Lynch Green. “She lay senseless in a little loft, about ten feet square, for twenty days before a favourable change took place: during this period she was visited by many of her neighbours, who were soon after seized in their turn. After she got well, her mother experienced a similar attack; hence, fresh sources of propagating the infection were opened, by a continual influx of visitors; and, if my memory does not deceive me, I once found nine people in this little place, at the time when the woman was thought to be at the worst. At the next door lived a young man, and an old woman his mother; the man was taken ill first, and, as he could not come down stairs, he was left to take care of himself, and absolutely perished for want of nourishment and assistance. I visited him a short time before he died, but the hand of death was already extended, and little could be expected from medicine. His mother was taken ill just at the same time, and was carried off in the course of a few hours, without having taken either food or physic. Soon after their funeral, the house was let to a man, his wife, and two children: as they were poor and dirty, it is very probable that it had not even the appearance of a cleaning; be that as it may, they were all four visited by this pestilence; but, by timely assistance, they at length recovered. In this way it went on from house to house, till it reached the principal street, and very few, I am afraid, in its progress, were so fortunate as to escape a visit.” The symptoms of this fever are minutely delineated as follows:

“On its first attack, the patients complained of an unusual weariness, a dejection of spirits, loss of appetite, and wandering pains in various parts of the body; these symptoms were followed by an intense rigor, a giddiness of
the

the head, noise in the ears, red, watery, inflamed eyes, which, as the disease advanced, became of a dead glassy hue; weak, quick, and low pulse; but sometimes so full, as, in any other complaint, would indicate bleeding. In a few hours, if nature was left to take her own course, an intense burning heat succeeded, with delirium almost approaching to madness; a dark-coloured eruption now appeared on the neck and breast, which spread over every part of the body; the throat was black, with gangrenous sloughs; sudden and great prostration of strength followed the increased action; the tongue became black, dry, and quivered, on putting it out of the mouth; the limbs trembled, the pulse sunk, intermitted, and fluttered; a hic-cough came on, with difficulty of breathing, and cold, clammy sweats, which, in a very short time, brought life to a conclusion."

When the author had an opportunity of visiting his patients on their first attack, "they uniformly recovered, unless debilitated by old age or previous sickness." He usually began "by exhibiting an emetic and a gentle laxative at the commencement of the disease, with a view of removing the morbid matter from the tonsils and primæ viæ; and, if the delirium came on very rapidly," says he, "I have repeated the emetic, more than once, with evident advantage; besides, I think it not only caused the eruption to appear more florid, but, at the same time, checked the inflammation of the tonsils; and I have more than once remarked, that, when this has been done, the sloughing and ulceration of those parts have been much less considerable than when it was omitted. In the exhibition of emetics, I have, in no instance, ventured upon antimonials, but trusted entirely to ipecacuanha; because there are some constitutions where the tartarite of antimony will not excite vomiting, unless given in very large doses, but passes off by the bowels; and as a disposition to diarrhœa is

is sometimes a very prominent symptom in this complaint, it certainly would not be advisable to add to it by administering such a medicine. After the bowels were cleansed, I at first gave the camphor mixture, joined with the tincture of Virginian snake-root; but, in those cases that came under my care, it did not answer my expectation, as the symptoms of debility came on so rapidly. I therefore, without waiting for a remission, gave the patient a mixture with the decoction of bark, compound tincture of the same, and acid elixir of vitriol; to take three spoonfuls every two hours, and, if it did not disagree with the stomach, I added the powder, as circumstances required, in considerable quantity."

Besides these means, a camphor liniment or blister was applied to the external fauces; and an acidulated gargle was also employed frequently. The diet was chiefly panada and sago, with diluted port wine or brandy, accompanied with the liberal use of acescent fruits: bottled cyder and London porter were likewise employed in moderate quantities, repeated at short intervals.

"By a continuance of these remedies, the complaint has, at length, gradually subsided; sometimes running on for half, or even a whole lunation; and, at other times, subsiding in the course of a few days. The first favourable change was generally a deposit in the urine, attended with a slower and fuller pulse, and, in most cases, a scabby eruption has broken out at the corner of the mouth, which has never failed to prove critical; and in no one case where this has happened have I seen a patient die. In some cases, a tendency to diarrhœa has been particularly observable, which has brought on prostration of strength very rapidly. In one patient, a woman, by no means of a very delicate habit of body, I gave a gentle laxative, at the commencement, to clear the primæ viæ, particularly as the foetor was extremely disagreeable; and, although in health,

health, it would not have produced more than a single evacuation; yet when I called to see her the next day, I was informed she had sixteen loose stools; and her ghastly countenance and feeble pulse by no means belied the assertion; however, by temperate cordials and opiates, it was checked; yet, notwithstanding, a considerable time elapsed before she recovered her health and strength. In several instances I have made use of yeast, given in the quantity of a tea-spoonful, every fourth hour, with surprising good effects; it not only serves to take off that extreme debility, but evidently occasions the pulse to become slower and fuller: the first time I gave it was in a woman, whose case was hopeless; she had been delirious for several days; her skin had that caustic feel which so strongly marks the disease; the tongue was black, rough, and cracked; and her teeth were so enamelled with corruptive sordes, that they were scarce visible; her eyes sank in her head; her voice, when she did articulate, was hoarse, hollow, and confused; her stools black, and her pulse weak, and so frequent, that they could scarcely be counted. I procured some good yeast, and desired half a tea-spoonful to be given every two hours, diluted with a little red wine. The next day, on going to visit her, I was much pleased to find the pulse slower and fuller; she had taken more nourishment, and by the continuance of the yeast, and other remedies, all the symptoms gradually became milder, and in process of time they finally subsided." This poor woman, however, at last sunk under her complicated misery.

"The manner in which I have usually administered the yeast, has been, by putting a large spoonful, or more, according as it agreed with the stomach, into a quart bottle, and filling it up with mild porter: of this the patients took a glassful every hour, or oftener, if they were thirsty. I have found it particularly useful in a great number

ber of cases, and therefore I cannot avoid recommending it as a most powerful antiseptic in malignant fevers. I have generally given it from the beginning, and persisted in its use till a restoration to health took place. I have also recommended it with advantage in a few cases of ulcerated sore throat, where the foetor has been very disagreeable; and the constitution considerably affected; indeed, it is surprising, where there is a tendency to gangrene in the throat, how soon this remedy will alter the colour, and dispose it to slough kindly. Should there be any prejudice in the minds of the attendants against its use, it may not be improper, with a view of avoiding any reflection, to send it as a medicine, joined with a little spirits of lavender, and camphor mixture; more especially as I have been informed, that in an unsuccessful case, where this remedy was tried, the practitioner was accused of occasioning the patient's death."

The author very properly suggests, that "it is not any peculiar virtue in the yeast itself that we are to depend upon as a remedy in these complaints, but the fixed air which is involved in it; as, when that is extricated, it is perfectly inert." He therefore inquires whether it would not be much better to exhibit this gas, by impregnating beer with it, instead of continuing the yeast? or, says he, we might employ the artificial Seltzer water for the same purpose. He tells us he also used the oxygen gas, in this disorder, with considerable advantage; and the following was his method of administering it:

"I first cause the doors and windows of the sick person's chamber to be closed; and then, taking a chafing-dish with some live coals, throw into it half an ounce of purified nitre in powder, which immediately fills the room with a thick white cloud, that continues wafting about for a considerable time. On examining a patient during this operation, I never fail to find that it increases the pulse; and,

and, however low it may be, does, for a time, give it a degree of vigour and energy. In a few minutes more, the difficulty of breathing diminishes; the blood-vessels of the cheeks and lips become of a more florid hue; and a gentle perspiration breaks out on the skin. This process I direct to be frequently repeated in the course of the day; and I have seldom seen it regularly persevered in, without producing decided benefit."

In the concluding pages of this essay, our author points out several varieties observable in this malignant fever; and gives a detail of some cases which are highly deserving the attention of medical practitioners. T.

ART. III. CHRISTIAN-FREDR. LUDWIG *de quarundam Ægritudinum humani Corporis Sedibus et Causis Tabulæ sedecim, Meditationibus nonnullis illustratæ.*

IN the preface to this work, the author makes some observations on the difficulty attending the representing diseased parts by engravings; and proceeds to point out how imperfectly the pathology of bones is known in the present day.

The acrimony of the marrow, owing to a diseased action of the vessels of the membrane in which it is included, and particularly of the absorbents, is, in the opinion of Ludwig, the most frequent cause of diseases of the internal parts of bones; and he appears to found the whole of their pathology upon the doctrine of acrimonies. Having laid down some general hints upon the pathology of the bones, considering those of the external and internal periosteum, the compact, spongy, and reticular substances, and the medulla of bones, separately, he next gives his commentaries upon the different cases of affections of those parts which form the subject of these plates. They contain many useful
and

and interesting remarks, amongst others, upon the osteosteatoma, upon necrosis, upon a caries of the lumbar vertebræ in consequence of an abscess of the psoas muscle, upon a venereal caries of the femur, upon the chronic separation of the epiphyses of bones, upon a distorted spine, and an anchylosis of the femur with the os innominatum. We lament that we cannot follow the author in the detail of these different facts, owing to its having so many references to the plates as to render it impossible; and especially as most of the observations, except those on necrosis, are rare, and important to the surgeon in the practice of his art.

E.

ART. IV. *Facts and Observations relative to the Nature and Origin of the pestilential Fever which prevailed in the City of Philadelphia in 1793, 1797, and 1798.* By the COLLEGE OF PHYSICIANS OF PHILADELPHIA. PHILLIPS, London. 1799. Price 9d.

WE learn from this pamphlet, that in the months of July and August 1793 the yellow fever broke out in the city of Philadelphia, and destroyed nearly five thousand persons before the frost set in. On the 25th of August the College of Physicians in that city assembled to deliberate on the necessary steps to be taken on so alarming an occasion. That learned body was afterwards required by the State to inquire minutely into the origin of the disease, and to point out what precautions should be adopted to extinguish the latent infection. The physicians reported, that they never knew of any instance of the yellow fever having been generated in the State, although it had frequently been imported, and prevailed for a time. They were therefore of opinion that this disease had been brought to Philadelphia by some of the ships which arrived there toward the end of July 1793.

About

About the latter end of July 1797, the fever reappeared in the same city. More than three months afterwards the College recommended the following measures to be adopted by the governor of the State, in consequence of a letter he directed to them :

“ SIR,

“ We have duly considered your letter of the 24th ult. and shall cheerfully comply with the requisitions contained therein.

“ The measures to be pursued for purifying the city from any latent infection, are such as we have heretofore recommended, viz. a strict attention to cleanliness, washing, white-washing, and ventilating the infected houses, bedding, and clothing, and fumigating them with charcoal and sulphur, or a mixture of oil of vitriol and saltpetre. These, with the frost, we believe, will be found sufficient entirely to destroy any latent contagion.

“ But the latter part of your inquiry, viz. What precautions are best calculated to guard against the future occurrence of a similar calamity, is an object of such magnitude, as to demand a more particular reply.

“ We have, on former occasions, communicated our sentiments on this head; but as you now inform us, that it is intended to establish a foundation for future regulations, we willingly enter into the detail; and though this will principally consist of repetition, yet it may be useful to have our ideas presented in one view for your consideration. And as these sentiments have been more fully confirmed by recent events, we are again induced earnestly to recommend a strict adoption of the measures we advised in our communication of August 18th, 1797; as being the best calculated to guard against the future introduction of contagious diseases. We now recapitulate those advices, with some additions.

“ Let an entire new health-law be made, constituting a Board of Health, to consist of five persons, two of whom

to be practitioners of physic. The smallness of the number will ensure responsibility, and a constant residence in the city; and the professional knowledge of the medical characters will be necessary to assist in directing the measures of the board. Let no person whose private interest may be affected by quarantine laws, be a member of this board.

“ Let a sufficient sum of money, *per annum*, be subject to the draughts of the board, who shall render to the Assembly a yearly account of their expenditures. Let this board sit daily during the months of July, August, September, and October; and, during these months, let every vessel from the Mediterranean, Coast of Africa, West Indies, and continent of America to the southward of Florida, perform an effectual quarantine. Let the cargoes of suspicious vessels be unloaded, and, with the vessels, be purified at the Island.

“ Let a resident physician, or health-officer, be appointed, who shall never be absent from the Island during the above-mentioned months, and a consulting physician, who shall reside at Philadelphia.

“ Let the punishment of a master of a vessel, who evades the law, by landing cargo, crew, or passengers, contrary to the intent and meaning of it, be the same as for murder of the second degree. Let no vessel of war ever be allowed to come above the fort.

“ Let co-operative laws be procured from the neighbouring legislatures or from Congress.

“ Let the Board of Health have power, with the concurrence of the governor, to cut off the intercourse with infected persons and places. Let the long-projected hospital be erected.

“ Let the most diligent and scrupulous attention be given to cleaning and watering the streets, gutters, and wharfs, throughout the city and liberties.

“ Such are the precautions which we believe best calculated

lated to guard against the future occurrence of calamities similar to those we have experienced. If further discoveries shall happily add to our knowledge on this important subject, we shall not fail to make such communications to the governor without delay."

The College moreover stated, in a distinct memorial, their reasons for believing the disease to be of foreign origin: and this part of their report is highly deserving attention.

"When the destructive pestilence raged at Marseilles in 1720, there were found physicians of eminence; who strenuously maintained, that it was neither a contagious nor an imported disease. They derived it from the poor diet of the lower class of the inhabitants; and although they saw the vessel that brought it, and the most unequivocal and dreadful marks of contagion, yet they still persisted in their first opinions. Similar contrarieties of opinion prevailed at Messina in 1743, but efficient quarantine laws have since preserved Marseilles and Messina from this destructive visitant, although continually exposed.

"In the present year the city of Baltimore has been preserved in a similar manner, and we would ask, Is the city of Boston more exposed by its situation to the generation of tropical diseases than Baltimore? Where do we see the first appearance of our pestilential fever? Is it amongst the marshes to the south-west of our city, or in the neighbourhood of our wharfs? Is it in the confined alleys, or on the salubrious banks of the Delaware at Kensington? Is it not always near those places where vessels from foreign countries are found?

"Look at the disease itself; does any fever of our country ever assume such forms, or produce such effects? Do our severest bilious fevers generally terminate fatally in a few days? Do they steal on insensibly, infecting one person after another in a family and in a neighbourhood? Are they ever equally severe in seasons so opposite as 1797.

and 1798? Do not the rise, the symptoms, the progress, and the termination of this fatal disease, demonstrate that it is totally different from any thing we have been accustomed to?

“ But more particularly to examine the subject: our principal reasons for believing that this disease does not originate amongst us, are the following:

“ First. It differs essentially from any other disease which is common to this country, and agrees in its most essential symptoms with what is called the yellow fever in the West Indies.

“ Secondly. It has been regularly traced to the vicinity of some vessel or vessels from the West Indies; or to persons or clothing connected with them.

“ The principal peculiarities of this fever are, its contagious nature, the progress of the symptoms, and the mortality consequent on it.

“ To endeavour to prove the contagious nature of this disease would, in our opinion, be equally useless as to prove the contagion of the plague. But in all our observation and practice, we know of no case where the autumnal bilious remittents of our country have proved contagious. We are aware that these are sometimes attended with violent and dangerous symptoms; but this striking characteristic of contagion being always absent, they never become an object of public dread or concern.

“ The characteristic symptoms of the disease are, generally, a constant fever for about three days, which, in dangerous cases, is followed by a cessation thereof. The concomitant symptoms of yellowness of the skin, and vomiting of black matter, which are so common in this fever, do sometimes, though rarely, occur in other diseases.

“ The mortality that ensues is such as is common when pestilential diseases prevail. The general confusion and de-
sertion

sertion of the sick, naturally add to the fatal consequences of these diseases.

“ As to the second point, the origin of the fever, we may observe, that until the year 1793, no doubts on this subject, as far as we know, had been promulgated in America. Doctor Lining, of Charleston, South Carolina, one of the best, and the only American author who had then published on the subject, and who wrote in 1753, expressly informs us, that the yellow fever had prevailed in that city four times within twenty-five years, and that whenever it appeared there, it was easily traced to some person who was lately arrived from some of the West India islands, where it was epidemical.

“ It may not be improper here to remark, that very erroneous opinions on this subject have arisen, from confounding this pestilential fever with the malignant remittents of the West Indies and America. The difference still holds good, that these last are not contagious, if we may give credit to the writings and observations of physicians who have practised in the West Indies, added to our own. But the malignant fever which prevailed in this city in 1793, 1797, and 1798, was always more or less so, according to circumstances.

“ A striking peculiarity, which does not occur in any other disease, attends the yellow fever in the West Indies. The natives and persons who have resided long in those islands, are very seldom seized with this fever. It was likewise remarked, and it is a circumstance that deserves particular attention, that very few, if any, of the Creole French in this city, suffered from the contagious malignant fever which prevailed here in 1793, 1797, and 1798, though the disease was introduced into their families; and children born in this country of Creole parents, died with it last autumn, while the parents and the children born in the West Indies, were entirely exempt from it. To European French, Irish, and other strangers, the disease was remarkably

fatal. It is an observation founded in long and extensive experience, and which admits not of an exception, that strangers are the greatest sufferers from the diseases of the country into which they migrate: were the yellow fever a disease of our country, the Creoles would probably have been among the first to experience its fatal effects; but as it is of West Indian origin, and their constitutions are assimilated to it, they escaped it here as they do in their native country. The natives of the West Indies being so seldom affected with the yellow fever, has given rise and currency to the opinion, that it is not contagious in that country, and with respect to them, the observation is well founded; but then it is as highly contagious to Europeans and Americans in the sea-ports of the West Indies, as it is in this city when introduced here.

“ It is no new opinion that pestilential fevers are generated in ships or transported by them from one place to another; and that when they are brought to a sea-port, where the climate and season favour their spreading, they always do so in a greater or less degree.

“ The plague is checked by a great heat and severe cold in the cities of Europe and Asia. We have full proof of the effect of cold upon the malignant contagious fever in North America.

“ We have equal proof that efficient quarantine laws have latterly preserved the sea-port towns of Europe from the introduction of the plague; and the example of Baltimore, in the present year, shews us what may be done in America in this respect. The inefficacy of our own laws and regulations in this important matter is well known, and much regretted by all who have been concerned in their execution.

“ Perhaps a more particular attention to the circumstances of the fever of the present year, may place this subject in a clearer point of light.

“ In the months of June and July last, twenty-seven
vessels

vessels arrived in this port from Cape Nichola Mole, Jeremie, and Port-au-Prince, in the island of Hispaniola or St. Domingo, places which had long been garrisoned by the British forces, and of consequence more peculiarly adapted to the generation of pestilential diseases.

“ It is a well-known fact, that these places were evacuated in great haste, and that a considerable number of American vessels, which lay there, were employed to transport the British garrison; and if we are to give credit to the facts related by Pringle, Lind, Brocklesby, Young, Carmichael Smyth, and others, contagion is not only generated in such circumstances, but for a long time retained, by clothing, bedding, tents, and sails, even walls and timber.

“ We have further proof that the yellow fever prevailed in those ports while the above-mentioned vessels lay there.

“ On the fifth day of July last, six or eight of these vessels, having a large number of passengers on board, of course a quantity of clothing, bedding, &c. brought off in the greatest haste, themselves exposed to all those circumstances which are generally allowed to produce contagious fevers: in this situation they arrived at the Fort, where they were detained on board for twenty days, an occurrence well adapted to heighten the violence of the contagion. On their arrival at the city, after this detention, they generally lay at the wharfs between Walnut and Spruce Streets. And it is well known, that at this part of the city the fever first appeared, about the latter end of July and beginning of August, and spread from thence to almost every other quarter. These are facts too recent and too generally admitted, to require further proof.

“ On the evening of the eighth of July, the armed ship Deborah, Captain Edward Yard, arrived at the Fort from Jeremie. She buried *eight* persons during her stay there and return, and sent *six* sick to the marine hospital. She

was one of those employed to transport troops in the West Indies. After a detention of ten days this vessel came up to the city. We have been assured that some of her crew were brought up before her arrival.

“ On the twenty-eighth of July, the *Deborah* was moved to Kensington, where she was hove down. We can clearly trace the rise and progress of the disease at that place to this vessel, and also the first appearance of it in some other parts of the city, to persons who had been on board her.

“ On the sixth day of August, the College recommended to the managers of the marine and city hospitals, that all the vessels lying between Walnut and Spruce Streets should be removed to a proper distance from the city; instead of which they were distributed indiscriminately to the other wharfs, except in one instance, most of them being sent to the upper parts of the city.

“ From the many sources of contagion above enumerated, existing at the same time, and being so generally spread, it is not surprising that the disease had such an extensive operation; and it is to this extraordinary circumstance that we also ascribe the introduction and prevalence of this disease at Chester, Wilmington, and Marcus Hook.

“ A disease so fatal and so destructive, has naturally directed the public attention to discover the means of preventing its future recurrence. And as men are generally inclined to ascribe effects to surrounding circumstances, so in the present case a variety of means have been suggested to prevent any future calamity of a similar nature.

“ But when we reflect, that Philadelphia is one of the cleanest, best aired cities in the Union; that Kensington, Chester, and Wilmington, enjoy all the advantages of country air; that no possible improvement with respect to water or ventilation, can make our situation more eligible than that of these places; and particularly when we consider,

sider, that the situation of Wilmington precludes all idea of a defect of ventilation; and that New York, being furnished with water brought from a distance, the bad quality of our water cannot be the cause: when we observe that our city has become more healthy by the salutary improvements made in it, that the number of our common native diseases, such as autumnal remittents and dysenteries, is greatly diminished; when we also observe that it is only in sea-ports that this fatal pestilential fever prevails, why should we refuse, in this particular instance, candidly to deduce effects from causes, and to admit, that although local circumstances may favour the spreading of such diseases, yet, as they can always be traced to the shipping or its neighbourhood, or to persons or materials connected with shipping, that there are the strongest reasons to conclude that they are introduced from thence?

“ From the preceding facts and observations, we think the following conclusions may be justly drawn :

“ That the contagious malignant fever which appeared in this city in the years 1793, 1797, and 1798, is essentially different from the bilious remittent fever of this climate.

“ That the contagious malignant fever of those years is essentially the same with the disease called the *yellow fever* in the British, and the *maladie de Siam* in the French West India islands.

“ That the *yellow fever*, or *maladie de Siam*, prevailed in a very great degree in the different ports of Hispaniola, during the last year, and more particularly in Port-au-Prince, Jeremie, and Cape Nichola Mole.

“ That a very great number of vessels arrived at this city from those ports, during the months of June and July 1798.

“ That this disease has been several times introduced into North America by contagion retained in the wearing
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apparel

apparel of persons who had died in the West Indies, although no person was sick on board at the time the vessel arrived in this country; and that we have demonstrated, as fully as it is possible in a matter which is not obvious to our senses, that the contagion of the fever of 1798 was imported from Jeremie, Cape Nichola Mole, or Port-au-Prince, in one or more vessels, which arrived here in June and July last.

“ That efficient quarantine laws, similar to those existing in Italy, France, and other countries, to prevent the introduction of the plague into their commercial cities, are the only effectual means to guard against the future recurrence of a calamity which threatens us with total ruin.

“ To conclude: We have, from the first appearance of this destructive pestilence in 1793, to the present time, endeavoured to discharge our duty, by warning our fellow-citizens of its appearance, and by pointing out the means of checking its extension when introduced; by informing the legislature of the proper methods of preventing its return, by strict quarantine laws and internal regulations: and although our recommendations have been too little attended to, yet we conceive it to be our duty again thus to publish our opinions on the subject in a more detailed and familiar manner, as well for the information of our fellow-citizens at large, as of those who are called to the very important office of legislation. In doing this we have no design of entering into or exciting contention; our sole aim is truth and the public good.

“ Published by order of the College,

“ JOHN REDMAN, President.

“ THOMAS C. JAMES, Secretary.

“ *Philadelphia, December 24, 1798.*”

This pamphlet concludes with an Appendix, comprising a variety of notes and authorities in support of the foregoing observations.

V. Z.

ART.

ART. V. *A System of Dissections. Parts IV. and V. With Plates.* By CHARLES BELL. Folio. JOHNSON, London. 1800.

THE fourth part is not inferior to the former : it contains dissections of the fascia and superficial parts of the thigh ; the diseases of the cutaneous veins, lymphatics, and fascia ; dissection of the ligament of the thigh, and femoral artery in the groin ; tumours in the groin ; further dissection of the arteries and nerves of the thigh ; accidents and diseases of the arteries of the thigh ; the popliteal aneurism ; and observations on the changes which take place in the capacity and action of arteries, and the circumstances which influence those changes : accompanied by four elegant engravings. We lay before our readers the author's remarks on the operation for the popliteal aneurism, as being of much practical utility.

“ Of the Operation on the fore Part of the Thigh for the popliteal Aneurism.

“ Particular attention should be paid to the anatomy of the crural artery, as it pierces the triceps muscle ; with a view especially to the high operation for the popliteal aneurism. We shall by and by consider the preference which the operation performed at this part holds over the older manner of operating for this kind of aneurism. The anatomy will shew us what parts we are to attend to in the operation ; but it may be necessary to point out the means of hitting these parts accurately on the living body.

“ We cannot study surgical anatomy by dissection alone ; but by a careful examination and comparison with the points of the living body, which are to be our guides. Here, for instance, the course of the sartorius muscle is of infinite importance. It is not easily brought into such action as will shew its course on the limb ; but if a weight be placed
upon

upon the ground, and we attempt to shove it sidewise with the ball of the great toe, it will be brought to swell and shew its course. The incision is to be made upon the inner margin of the muscle, beginning a little below the middle of the thigh, and following the curve of the muscle. In pursuing this first incision under the sartorius (its upper surface being kept in adhesion with the integuments,) and betwixt the origin of the vastus internus and the insertion of the adductor magnus into the thigh bone, we find the artery covered by irregular fibres of the fascia. There appears to be no foresight nor method of operating which can ensure success in this operation, except by guarding against too large an incision; by the accuracy with which it is made to correspond with the point of the artery to be tied; and by taking care that, in uncovering the artery, the parts are not too much loosened, especially the sartorius muscle. When the wound is extensive (and it is perhaps impossible to avoid it in a big and fat man,) a large suppurating sore is the consequence; and there will be a greater chance of the sinuses forming up along the side of the artery, which sometimes takes place even in the most dexterous operation. The consequence of this state of the artery is, that instead of being supported by the surrounding parts, it lies surrounded with matter; the ligatures, like setons, keep up the discharge; and the vessel ulcerating, the patient dies by the loss of blood, if not by one gush, at least by successive smaller bleedings. Another circumstance with regard to the sartorius muscle is, that when it is left loose in the wound, it swells and fills up the opening; so that the matter is confined.

“ Of the Anatomy of the Ham, and of the Aneurism at this Place.

“ As the anatomy of the ham, and the disease of the artery, have so strict a connexion with the subject of which we have now been treating, it will be better to finish
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the consideration of them here, than to leave it for separate explanation after the dissection of the hip and back part of the thigh.

“ Upon laying aside the true skin and superficial cellular membrane from the back part of the knee-joint, we have first to observe, as of the utmost importance in the diseases and operations, the strong fascia which covers the muscles and great vessels and nerves. We find a strong layer of fibres coming down obliquely from the outside, derived from the fascia lata of the thigh. From the projecting head of the fibula there runs upwards a layer of silvery fibres crossing the first. From the tendon of the membranous muscle an aponeurosis comes down, which, gaining additional fibres as it descends, forms a very strong sheath, covering all the back part of the leg. In other words, betwixt the two condyles of the thigh-bone, and from the head of the fibula and betwixt the hamstring tendons, a strong fascia of interwoven fibres is extended, and this is prolonged down upon the origin of the gastrocnemii muscles and back of the leg.

“ Upon slitting up and dissecting back the fascia, the great nerve appears. It comes down betwixt the biceps and membranous muscles, on a level with the top of the trochanter. It splits into two great branches: the greater continues its course betwixt the heads of the gastrocnemii muscles; whilst the lesser goes outwardly and obliquely downwards superficially (but under the fascia.) Splitting into branches, there goes off from the lesser branch, directly in a middle course betwixt the gastrocnemii muscles and fascia, a small nerve, which is accompanied by a considerable vein. But these will be more minutely detailed in the succeeding part of the work.

“ Below the nerve, and the superficial vein and long slender artery which accompanies it, there is much cellular membrane and fat. Under this fat, and close to the bone,
lie

lie the popliteal artery and vein. They are embedded in this tissue, and are intimately connected together; the vein more outwardly in its uninjected state, clinging round the artery, and the lesser branches of veins striding over it.

“ If the parts be accurately retained in their natural situation during dissection, it will be seen that, in order to find the easiest access to the artery in operation, our incision should be made rather towards the outer hamstring than immediately in the middle. By this means we keep to the outside of the ischiatic nerve. We shall find the artery lying deep, and covered with the vein; and to tie it separately, it must be disentangled from under the vein. But let us consider the state of the parts in disease.

“ *State of the Parts in popliteal Aneurism.*—The limb is generally œdematous; sometimes so much so as to make the pulse at the inner ankle to be felt with difficulty, independently of its faintness from the aneurism. The limb is in general considerably bent. Round the whole knee-joint there is much swelling; so that the tumour in the ham is not very distinct, but has more the feeling of general tension.

“ Upon laying open the integuments, the tumour comes more distinctly into view, distending the fascia.

“ With regard to the appearance and situation of the parts, particularly of the nerve, and great vein, and lesser saphena, it must depend upon the direction in which the coats of the artery first give way. If the artery shall have given way towards the inside, then the tumour will increase in that direction chiefly: while the artery itself will, in some degree, be pushed in the opposite direction, and the nerve and the vein will be crowded towards the outer hamstrings.

“ For the same reason, when the tumour, while yet small, has got to the outer side of the vessels, as it enlarges it pushes them towards the inside; or the nerve may even be

be carried directly forward upon the tumour. The natural anatomy, therefore, can only teach us the appearance of the parts, enabling us quickly to recognise them; but we can never *à priori* know their situation in this disease. In viewing Plate XVI. we should immediately determine, that the tumour could not originate from the coats of the artery, nor be an extension of them, since the tumour is so abrupt and circumscribed, and the artery immediately above partakes so little of the enlargement. It is only by observing the progress of similar tumours in the breast and belly, that we are convinced of the great dilatation which membranes will allow. They acquire so gradually additional strength and increase of thickness, that unless we were in a manner witness of the gradual change in the nature and properties of the arterial coats, we could not doubt that these tumours were formed by the cellular membrane gradually condensing, in consequence of inflammation and the impulse of the blood.

“ The popliteal aneurism takes place exactly in that part of the artery which must accommodate itself to the flexure of the joint. It would appear, however, that sometimes it occurs lower, in consequence of some violent action of the heads of the gastrocnemii muscles, or where the arteries of the leg are given off. The ostensible reason for the new method of operating, viz. on the fore part of the thigh, is, that the artery may be supposed to partake more of the disease, in proportion to its proximity to the tumour. But this is putting the merit of the operation upon an insecure footing; for we know that the diseased state of the arterial system is always greater towards the trunks, and that it is gradually encroaching upon the extremities; that the disease is common to all the system, though the peculiar situation of the artery subjects it to additional risks. These may even be increased by the circumstances of a patient's general habits or way of life; but especially this disease is frequent

frequent in such as keep the joint habitually bent, but are liable to occasional violent efforts of the limb, and chiefly of the gastrocnemii muscles. It was formerly observed, that horsemen were more especially exposed to it; and that class of men still continue to be the great sufferers by this disease. Whatever may be our reasoning upon this fact, it is evidently to be attributed to some cause which affects the portion of the artery which is subject to the flexion of the joint only; and if the ligature can be as easily and effectually secured three inches above the joint as upon the fore part of the thigh, it will be as effectually removed from those causes of failure of the artery which are peculiar to the joint, and there will be less chance of the general affection of the trunks having reached so far. The better reasons for preferring the new operation seem to be, the difficulty of operating in the ham: the depth at which the artery lies; and consequently the difficulty of drawing the ligature accurately: and when the operation succeeds, a permanent contraction of the limb is apt to remain, probably arising from the great nerve being so much exposed in the operation, that it must partake of the inflammation, and remain in the midst of the parts condensed and hardened in consequence of it. The power, or conveniency rather, which the higher operation gives of tying the artery again and again, following it up the thigh as the ligatures successively give way, is but a forlorn hope; whilst in the lower operation, amputation can be more conveniently done, and with better expectation of success. But the superiority of the new operation must be finally determined by those gentlemen whose ingenuity and professional skill have already done so much, and whose opportunities are unlimited."

The FIFTH PART of this work, which completes the first volume, includes the dissections of the back part of the thigh, and of the leg and foot,—with four plates. Upon

the whole, we recommend Mr. Bell's performance as one of the most useful of its kind now extant, although we cannot but admit that it has several imperfections. B. W.

ART. VI. DR. BLANE *on the Diseases of Seamen.*

(Concluded from page 438.)

THE author long ago suggested an opinion he entertained of certain MALIGNANT ULCERS being frequently contagious; and he now has endeavoured to establish that opinion by incontrovertible matters of fact.

“ It is found, from direful and multiplied experience, that not only those who are affected with actual symptoms of scurvy, but those who are exposed to the causes of it, and whose constitution is in such a train as so fall into it, are peculiarly susceptible of ulcers of the most malignant kind, from the smallest injury which breaks the skin. This might naturally be expected, from what has been said of the great debility of the fibres, and the deficiency of the powers of renovation and nutrition in this disease.

“ The characteristic symptoms of such ulcers, are; a thin fetid discharge, commonly mixed with blood, which sometimes coagulates on the surface. The ulcerated surface is soft and spongy, generally elevated above the level of the surrounding skin, particularly about the edges, where there are excrescences of luxuriant flesh, which, in the more advanced state of the ulcer, shoots into a soft bloody fungus, called by the sailors *bullock's liver*.

“ Besides the diet peculiar to a sea-faring life, I have now to mention another circumstance, which has not been much attended to, though it has greatly favoured the spreading of ulcers in ships of war.

“ From observing in the late war, that some ships were much more subject than others to ulcers, though in the same

same circumstances in point of climate, victualling, and the duties of service, I was led to an opinion of their being infectious. Some facts that have occurred in this war, have put this beyond all doubt.

“ From what has already been said respecting infection, it seems difficult to ascertain what diseases may be the subjects of it. It would appear that there is a tendency in all morbid secretions, whether fixt or volatile, to stimulate similar parts in other subjects of the same species, to a like action, and to a production of the like matter. As a certain concurrence of circumstances is necessary to render any disease whatever contagious, there may be some that are so rarely so, as not to be considered as at all of this nature. The doubts that have arisen concerning the existence of almost every contagion, have proceeded from its being observed, that no contagion or infection whatever affects every person indiscriminately, who is exposed to it, and that it does not take effect, except under a concurrence of certain circumstances of constitution, habits of life, air, and other undefinable particulars, all and each of which are indispensable in bringing about the effect. A number of delicate and accidental coincidences being necessary to constitute these conjunctures, and the application of infectious matter being only one of these, it is evident how it comes to pass that numbers who are exposed are not affected, and how certain diseases may not be at all infectious, except in circumstances which but rarely occur. Dr. Lind has brought together a number of facts, from which it is difficult to deny, that the sea scurvy itself may not sometimes be so; and proofs in favour of the same have occurred in my service. Judging from a gross view of the nature and history of this disease, we should be apt, *à priori*, to reject the possibility of this. But it seems extremely unphilosophical to deny the reality or possibility of any thing in nature, from our supposed knowledge of the means and causes

she

she employs, particularly in a branch of science so obscure as the animal economy. Could we therefore prove the point as a matter of fact, it would be in vain to controvert it upon arguments derived from our fancied acquaintance with nature's modes of operation.

“ With regard to ulcers, however, this objection does not apply; for it is evident from the *fætor* they diffuse, that there is a sufficient quantity of effluvia afloat in the air to serve as matter of infection, and to leave no difficulty in conceiving how it may be conveyed and applied.

“ The truth of this position will best be evinced, by bringing in proof of it a few facts out of many that might be adduced to the same effect.

“ The *Ganges*, of seventy-four guns, and six hundred men, arrived from the West Indies in the month of October 1796, with a great many foul ulcers on board, to which the crew had been subject for several months before leaving the West Indies. She was for some time at Spithead, under the use of fresh provisions, and again at Yarmouth, but the ulcers continued to multiply. She sailed on a cruise to the North Sea on the 2d of June 1798, with only two ulcers on board. During this cruise they prevailed more than ever; and as a proof that this was owing to infection, and not to a constitution depraved by sea diet, the surgeon remarked, that the new-raised men taken on board at Yarmouth (of whom a great number were necessary, in order to replace those disabled by ulcers) were much more liable to them than the old seamen from the West Indies. This complaint continued till January 1798. It then ceased; and the means which seemed to have the principal share in putting a stop to it, were the sending every case to the hospital as soon as it appeared, a strict attention to cleanliness, and a supply of vegetables. From the arrival of this ship in England till this time, two hundred and eighteen cases of ulcers were sent to different hospitals.

“ The propensity to this complaint was such, that the smallest sore, whether from a hurt or a pimple, fell into the state of an ulcer. Blistered parts also were affected in the same manner. Sores, which seemed to be in a healing state, would suddenly become gangrenous. A black speck in the middle was the constant forerunner of this.

“ The men who slept near the ulcerated patients, were most apt to be seized with them ; as also the centinels and nurses who were about them. The incisions of those who underwent surgical operations, and were placed among them, assumed the same ulcerous state ; while those who were placed in a remote part of the ship healed in a kindly manner.

“ Those ulcers were attended with symptoms of the most virulent and malignant kind. They began with violent inflammation, which suddenly terminated in mortification ; destroying in a short time the fleshy parts, so as to expose the bone, which soon became carious. They had all the characters of the worst sort of scorbutic ulcers, but they took place in constitutions in which there was no other symptom of scurvy, nor did they yield to lemon-juice.

“ The *Triumph*, of seventy-four guns, and six hundred and fifty men, had been employed during the greater part of the war on the coasts of Great Britain and Ireland. During summer and autumn 1798, she was chiefly employed in cruising on the coast of Ireland ; and in that time the crew was subject to malignant ulcers. Eighty-four were put on the sick list from May to December, both months included. Not only wounds and blisters fell into the ulcerated state, but a scratch or boil, and the orifice of the arm after bleeding, were subject to the same accident. Sores, which seemed to be in a healing state, would suddenly, and without any visible cause, spread again, and become foul and bloody, extremely painful, and resisting every means of cure. This unfavourable

unfavourable change always began, as in the Ganges, with a black spot in the middle of the ulcer, a symptom which seems peculiar to this infectious sort. The manner in which they begin is also characteristic of their nature. The surgeon of the *Triumph* agrees with the other gentlemen in describing their beginning as attended with violent local inflammation, great heat, and a full and strong pulse for several days.

“ An incident occurred, about two months after the men belonging to the *Triumph* had been sent to the hospital ship at Cork, which affords a farther proof of their infectious nature. Twenty-seven of these men were sent from thence as invalids to Plymouth in the *Atalanta* sloop of war. The same sort of ulcer spread among the crew of this sloop, seven of whom were affected with it during the passage.

“ Ulcers of the same kind prevailed to the most dreadful degree in the ships serving at the Cape of Good Hope, and the naval hospital there, in the years 1796 and 1797, producing the most severe and protracted sufferings, terminating frequently in the loss of limbs or life, or both. Nor were they confined to the lower extremities, so that the *ossa ilium*, the *scapula*, and *cranium*, would sometimes become carious. Their description is the same as has already been given; but in addition to the symptoms already enumerated, the lymphatic glands in the ham and groin sometimes swelled; the buboes in the latter suppurated, and they not only healed kindly, but the ulcers of the legs looked better while this suppuration continued. These ulcers were much more prevalent in some ships than in others; and they did not arise in any of them on their first arrival, at a time when the men were most highly scorbutic, but some weeks afterwards, though they had the advantage of the refreshments of the country; and they could, in some instances, be traced from the intercourse of one ship with

with another. I was informed by the surgeon of one of the ships of the line on that station, that some men having been sent from thence to the hospital for the cure of other complaints, they were seized with malignant ulcers originating from scratches or slight sores; although no ulcers of that description prevailed on board of the ship at that time, and although the men had the advantage of fresh and vegetable diet at the hospital. These circumstances are all in favour of their proceeding from infection, and not from climate, nor any thing peculiar in the circumstances of the service on that station.

“ It became frequently necessary to amputate at this hospital; and it was observed, that if the patients who underwent the operation remained in the wards with the ulcers, few survived, owing to the gangrenous and ulcerous state of the stumps; but when they were carried into a separate apartment, there were very few of them who did not recover.

“ It was observed, both in the ships and at the hospitals, where this species of ulcer prevailed, that the hands of those who dressed them, when the skin was broke, fell into the same sort of ulcer.

“ The contagious matter of ulcers, like all other infections, stimulates those parts only which are similar to those of the subject which produced it. Except, therefore, where the matter or effluvia lights on a suppurating surface, it does not appear that it proves at all noxious to health. It cannot fail of being drawn into the lungs, or swallowed with the saliva, yet no bad effect ensues; for many ships companies, affected with this complaint, were extremely healthy in all other respects.

“ It resembles the specific infections, producing febrile complaints, in this respect, that the parts become insensible to it after a certain time, like the small-pox, for they take on a healing disposition; but it differs from them in this respect,

respect, that after a certain time these parts recover their sensibility to its action, and again fall suddenly into the foul spreading gangrenous state, as is mentioned in all the accounts of this complaint.

“ Whether this infection depends in all cases on a concentrated state of the effluvia of scorbutic ulcers, or if it be generated by the peculiar disposition of individual cases, is a question I am not able to resolve; but I hope its history has been sufficiently investigated, to lead to some valuable practical inferences with regard to the prevention and cure of these ulcers.”

For the prevention of malignant ulcers, Dr. Blane particularly enjoins—(1.) A careful review of the ship's company, to find out those persons who may have small hurts and sores. (2.) A vegetable diet, with fresh provisions, and an ample supply of lemon-juice. (3.) A proper defence and support of the parts liable to be affected. (4.) Ventilation, cleanliness, and complete seclusion from diseased persons. Under this last head, the author very properly cautions the dresser of such ulcers against conveying the infectious matter from a foul sore to a clean one, by the hands, or instruments, utensils, and dressings employed; “ for,” says he, “ a small recent clean wound has been known to fall into the state of a foul ulcer, by being washed with the same sponge which had been used to an ulcer of that description.”

Of the treatment of malignant ulcers. The remedies here recommended are ranked under the heads of air, diet, exercise, internal medicines, and external management. The necessity of pure air is strongly insisted on; and the whole labour of the surgeon is said to be lost in different cases of ulceration, “ from the sores being continually exposed to each other's effluvia.”

It is observed, that although fresh vegetables and the acid juices are essentially requisite in scorbutic ulcers; yet

this advantage in diet will not effect a cure in very malignant cases, unless pure air, by ventilation, cleanliness, and separation, has also been freely obtained.

With regard to the next head enumerated, there is a difference of opinion among practitioners of experience. Dr. B. thinks exercise in the open air should be used by persons having stationary or convalescent sores; but that in the acute or spreading ulcer, while much inflammation exists, absolute rest should be enjoined.

The most useful internal medicines in bad old sores are, lemon-juice, wine, Peruvian bark, and opium; but in the inflammatory stages, all tonics and cordials, except opium, are to be prohibited. "In ill-conditioned ulcers in general, opium has been found superior to bark in producing a disposition to heal, and in converting the thin ichorous discharge into a healthy suppuration, which it probably does by suspending irritation and pain, and perhaps by promoting that absorption by which good pus is thickened. Opium may therefore be considered as the most valuable of all the means which are purely medicinal. The employment of it not only as a palliative for the temporary removal of pain, which used to be considered as its only use, but as a powerful means of correcting the worst disposed ulcers, and even of counteracting gangrene in some cases, by a continued and free administration of it, is one of the principal improvements in modern practice. This is conspicuous, not only in the ulcers in question, but in the phagedenic buboes, which are almost the only fatal termination of the venereal disease; for these are so much under the control of opium, as seldom to be found incurable and mortal where it is properly employed."

The author again repeats, "that in the infectious ulcers existing independently of scurvy or the causes of scurvy, both diet and internal medicine seem to be of little service, and the cure rests entirely on the dissipation of infectious effluvia,

effluvia, or the removal from it, and upon local treatment, which is the only part of the subject now to be considered."

Some of the best external applications, known among practitioners of experience, are next enumerated, classing them into those which are employed in the form of vapour, those of powder, and of ointment; after which the mode of applying mechanical compression is adverted to. Under each of these particulars will be found the substance of the best modern writings on ulcers.

There are VARIOUS CASUALTIES uncommonly incident to a sea life; a concise account of the most approved means of counteracting these, was considered by Dr. Blane as a proper article in this work. He particularly treats of drowning, suffocation, poison, intoxication, cold, and burns. On each of these subjects he has given very pertinent instructions; after which follow some valuable observations on sores and wounds.

At the end of this volume are two letters from the author; the former of which is on the nature of the *yellow fever*, and the means of preventing it. His situation as physician to the fleet, and as a member of the navy medical board, has brought many facts on this subject to his knowledge.

Wherever the author had witnessed this fever in the West Indies, it was evidently infectious; and there can be no doubt, he says, that it was so in North America. This fact is illustrated and proved by a striking example.

"On the 16th of May 1795, the *Thetis* and *Hussar* frigates captured two French armed ships from Guadaloupe on the coast of America. One of these had the yellow fever on board, and out of fourteen men sent from the *Hussar* to take care of her, nine died of this fever before she reached Halifax on the 28th of the same month, and the five others were sent to the hospital sick of the same distemper. Part of the prisoners were removed on board of the *Hussar*; and though care was taken to select those

seemingly in perfect health, the disease spread rapidly in that ship, so that near one-third of the whole crew was more or less affected by it."

Dr. B. next considers the origin of this disease, and endeavours to prove that it was imported into Philadelphia. Supposing it established, as a truth, that the yellow fever arose from imported infection, he inquires what are the precautions necessary to prevent or counteract its influence.

"These divide themselves into three heads: first, the prevention of the importation; secondly, the prevention of its spreading; thirdly, the removal of those circumstances which predispose to its action. Under the first head are included the regulations relating to quarantines. The second head is extremely important, and the neglect of it has at all times given occasion to the extensive spread of pestilential disorders. The principle of it is comprised in these few words, 'to discover the first beginnings of disease, and to cut off all intercourse with the infected.' The third head is one which has not been commonly enumerated and treated of by those who have written on this subject. It is only, however, necessary to reflect on the present situation of London to become sensible of its great importance. It is extremely doubtful how far this city owes its safety to quarantines; and there is no proof of the pestilence having ever been stopped in England by the vigilant detection of its first invasion, and the consequent adoption of wise and vigorous measures to prevent intercourse. But the advantages of spacious and airy habitations, of personal cleanliness, of dryness and cleanliness from forming drains and common sewers, are undeniable. The commerce in this age to all parts of the world so far exceeds whatever was known in former ages, that there is, most probably, at all times enough of infection in the warehouses of London to kindle the flames of pestilence, if the fuel were duly prepared and disposed for its action.

Drains

Drains and common sewers, therefore, of the most perfect construction that can be devised for promoting dryness and sweetness, by carrying off all superfluous moisture, and for conveying all manner of filth and soil under ground, could not fail to be highly conducive to general health, and to prevent the future visitations of epidemic fevers. Whether the late fever has been owing to imported infection, or to the bad air of the place, this precaution is equally founded upon reason. I consider the drains and sewers of London as the most essential circumstance in promoting that decency, comfort, and health, enjoyed so long by this great metropolis, in a degree of which I believe there is no example in ancient or modern times."

The author concludes this letter by recommending the introduction of Dr. Carmichael Smyth's mode of fumigating with the nitrous acid vapour, "as one of the means for the expurgation of the infection of the yellow fever."

In a letter to Sir John Hippisley, Bart. and Member of the Quarantine Committee of the Turkey Company, our author states the advantages of *floating lazarettoes* to be, "1st, That they are more airy than those on shore, of the most approved construction, which are surrounded by high double walls. The flux and reflux of the tide also produces some degree of salutary agitation of the air, and both their ports and upper works are constructed with lattice-work for the free perfusion of air. 2dly, That they are more easily guarded. 3dly, That they are less expensive. 4thly, That they are moveable; and 5thly, That they admit better of being multiplied.

"The only advantage that occurs to me of lazarettoes on shore over those afloat, is, that they afford a more agreeable retreat to passengers and others during their confinement. This is well worth attention, not only from considerations of humanity, but because every addition to personal hardship is an additional temptation to infringe the established

established rules. This advantage might easily be combined with the floating lazarettoes, by erecting some apartments on a small scale on the adjacent beach for the clothing and purification of such persons, and for their residence during the prescribed time. But if these floating lazarettoes should not be considered as ultimately preferable, they certainly are unexceptionable as temporary succedaneums; more especially at this moment, when, from the political relations of the foreign powers, a great increase of the Turkey trade is rendered probable, and when every obstacle to it should be removed, in so far as is consistent with the public safety. And in case they should be found adequate to the purpose, I apprehend no intermediate quarantine would be necessary in the Mediterranean, such as is prescribed to be performed at Malta, Leghorn, or some other port in the Mediterranean or Adriatic; for this was intended by the legislature merely as a temporary regulation, till lazarettoes should be built."

Lastly, are some "Queries, submitted to Doctor Johnston and Doctor Blane, by the Turkey Company; with their answers:" likewise, some "Improvements proposed by Dr. Johnston and Dr. Blane, in the construction and regulations of the lazarettoes in Standgate Creek." Z. T.

ART. VII. *Some few Cases and Observations on the Treatment of Fistula in Ano, Hæmorrhage, Mortification, the Venereal Disease, and Strictures of the Urethra.* By JOHN ANDREE, M. D. Member of the Corporation of Surgeons, London, &c. Octavo. pp, 47. NICOL, London, 1799. Price 1s. 6d.

THE author, in several cases, has been enabled to effect cures of the fistula in ano, merely by the use of internal remedies and appropriate local applications.

He lays considerable stress, in hæmorrhages, upon
bringing

bringing the bleeding vessel into view, before any attempt is made to employ the ligature; and in cases of internal hæmorrhage, he advises cold bathing or ablution.

On the subject of mortification, our author observes, that “ opium is a medicine of equal, if not superior, efficacy to the bark;” and he subjoins two cases to establish his opinion.

In the year 1779, Dr. Andree published some observations on the venereal disease: he now offers a few additional remarks on that complaint, which do not impress us as either new or important.

He thinks serious evils are likely to accrue from the indiscreet use of caustic, in strictures of the urethra. “ The great objection,” says he, “ which has ever struck me, to the use of caustic, is the difficulty of applying it with certainty, so as to act only on the stricture, and not to injure the sound part of the urethra. This objection is such as appears very difficult to overcome, since the urethra is, in some cases of long standing, tortuous in the diseased part. In such strictures, which I suppose not to be uncommon, a perseverance in the use of the caustic, so as to pass the stricture, would be liable to burn through the membrane of the urethra, and to incur the danger of violent inflammation and its formidable consequences.” The author, however, admits that this treatment is more likely to effect a speedy cure than common bougies, in cases of stricture occasioned by a membranous filament across the urethra. He alludes to an instance, within his own knowledge, of violent inflammation in the genitals having been produced by a caustical application, and the patient's life being in imminent danger.

On the whole, therefore, he advises that the common bougies should always be employed, before having recourse to the caustic; and in cases where the bougies would not pass singly, he has used the following expedient with success;

cess : on introducing two or three small bougies together, he first pressed forwards one and then another, till he had passed through the stricture. If one of them pointed in a wrong direction, it has happened that another was right. This suggestion may perhaps be worthy the attention of surgeons.

U.

ART. VIII. *The Clinical Guide ; or, a concise View of the leading Facts on the History, Nature, and Treatment of such local Diseases as form the Object of Surgery. To which is subjoined, a surgical Pharmacopœia, divided into three Parts : viz. Materia Medica, Classification, and extemporaneous Prescription. Intended as a Memorandum-book for Practitioners.* By WILLIAM NISBET, M.D. Fellow of the Royal College of Surgeons, Edinburgh, one of the Surgeons to the Royal Infirmary, &c. Duodecimo. pp. 456. JOHNSON, London. 1799. Price 4s. 6d.

THE encouraging reception which the *first Part* of this work, comprehending medicine, has met with, induced the author to extend his plan to a *second*, on surgery. To those persons whose engagements do not allow them time to peruse larger works, this manual may be an acceptable companion. In treating any surgical disease, the same method is observed in this Part as was done in the former ; and the same attempt is made, as far as possible, to avoid all theory. The description of the disease is here first given, so as to distinguish it from every other ; its general history is then detailed ; this is followed by an account of its causes, and, where necessary, its prognosis ; and finally, the various modes of treatment. A surgical pharmacopœia is also subjoined, which cannot fail to be useful.

The author designs to publish another pocket volume, to complete his plan, on the subjects of midwifery and obstetrical pharmacy.

Y.

ART.

ART. IX. *A Translation of the Table of chemical Nomenclature, proposed by De Guyton, formerly De Morveau, Lavoisier, Bertholét, and De Fourcroy; with Explanations, Additions, and Alterations: to which are subjoined, Tables of single elective Attraction, Tables of chemical Symbols, Tables of the précise Forces of chemical Attractions; and Schemes and Explanations of Cases of single and double elective Attractions.* Second Edition, enlarged and corrected. Quarto. pp. 156. JOHNSON, London. 1800. Price 14s.

IN the advertisement prefixed to this volume Doctor Pearson acquaints us that the former edition would not have been published but with the view of benefit to students. It appears, however, to have been more extensively useful than was apprehended, and has been some time out of print. The same reasons now subsist which were the occasion of the former publication. In this edition, he has inserted a few more alterations in the denominations of the nomenclature, but it is requested that they may be considered only as *provisional*. The additional articles introduced are such as have been discovered by the progress of chemical science.

The arrangement of the system of nomenclature displays an extensive field of chemical attractions subsisting between a great number of heterogeneous substances; and of course displays an arrangement of many chemical facts which it is not conceived could be learned in so short a time in any other way. This view suggested, in the first place, the usefulness of connecting with the table of nomenclature the order of these attractions commonly called Tables of Single Elective Attraction, according, however, to the new system; with such additions and alterations as the present state of chemical science would afford. 2dly, To give more precision, and for the demonstration of compound attractions, it was judged necessary to give Tables denoting, as far as known, the

the precise forces of chemical attractions between different substances. 3dly, As belonging to the subject of attractions, it was deemed necessary also to exhibit a number of cases of double elective attractions, with various methods of illustrating their mode of agency, and various methods of demonstrating them. Elementary books appeared to be in no department so defective as in this; wherefore it was determined to treat fully of compound elective attractions. 4thly, For the sake of brevity, and understanding ancient authors, the symbolical characters, in place of words to denote substances, were considered to be also properly subjoined, from the three principal Tables of them, viz. Geoffroy's, Bergman's, and Messrs. Hassenfratz', and Adet's. These additions have enlarged the present work to more than double the size of the former. T.

ART. X. *Essays on the Venereal Disease and its concomitant Affections. Part the Second; containing additional Evidence, with critical and practical Remarks, on the new saline anti-syphilitic Remedies; and an Answer to some Objections made against the former Part.* By WILLIAM BLAIR, A. M. F. M. S. Surgeon of the Lock Hospital and Asylum, and of the Finsbury Dispensary, &c. Octavo. pp. 352. SYMONDS, London. 1800. Price 6s.

THE subject of this essay (which forms the *second part* of a series) having long engaged the attention of the medical world, it is our wish to exhibit a copious analysis of its contents. For the present, however, we are only able to announce the publication of so respectable a body of evidence. This collection includes a variety of interesting communications, from different practitioners in England and upon the Continent; viz. Mr. Macartney, Dr. Rowley, Mr. Phillips, Dr. Hooper, Dr. Lidderdale, Dr. Buchan, Mr. Hope, Mr.

Mr. De Bruyn, Dr. Rollo, Dr. Thornton, Dr. Mitchell, Mr. Blizzard, Mr. Brown, Mr. Foot, Mr. Heaviside, Mr. Thomas, Dr. Beddoes, Mr. Wadd, Mr. Wickham, Dr. Trotter, Mr. Vise, Mr. Scott, Mr. Addington, Mr. Kerrison, Mr. Clutterbuck, Dr. Zeller, M. Fournier, Dr. Swédiaur, Dr. Fourcroy, M. Alyon, Dr. Tazewell, and several gentlemen in America. P.

(*To be continued.*)

ART. XI. *Observations on the Cure of the curved Spine, in which the Effect of mechanical Assistance is considered.* By JAMES EARLE, Esq. F.R.S. Surgeon Extraordinary to the King and to his Majesty's Household, and senior Surgeon to St. Bartholomew's Hospital. Octavo. pp. 81. JOHNSON, London. 1799.

IN addition to the method of treating distortions of the spine by caustic, as recommended by the late justly celebrated Mr. Pott, his favourite *Elève* here comes forward to communicate to the public the result of his experience of the effect of mechanical assistance in the same disorder. The pamphlet begins with a few remarks on the anatomical structure of the spine, and on the effects of its derangement. After enumerating the distortions, which, however extensive, never produce paralytic affections nor prevent the perfect use of the limbs, the author observes that "there is another disease of the spine consisting in a distempered state of the ligaments and bones, which, if suffered to proceed and increase, causes a paralysis, or, more properly, an abolition of the powers of using and sometimes of moving the lower limbs. To this distemper both sexes and all ages are liable; but it has seldom been seen to commence in persons above the age of forty, it is often supposed to arise from accident, and, both in young persons and

and adults, ascribed to some blow or fall. That it may be produced in some habits by such means is certain, and I have traced it in many instances from such a source; but in many more it happens that no such cause is assignable. Persons under such circumstances begin to stoop or falter in their walking, before they think at all of their back, or of any violence offered to it.

“ The curvature of the spine, which is the cause of this complaint, varies in situation, extent, and degree, being either in the neck or back, or sometimes, though very seldom, in the upper part of the loins: in this case, whatever may be its extent or degree, it is at first almost always the same; that is, it is from within outward, and seldom or never to either side. The smallest curve, in which two or three vertebræ are concerned, is attended with the same symptoms as the largest.

“ On this disease that excellent author and practitioner the late Mr. Pott bestowed much pains and attention; before his time it was not understood, and as, at least modern times, no attempt to cure it has been invented, those who were afflicted with it were deserted, and left to linger out a miserable existence. It remained for the sagacity of Mr. Pott to investigate its cause, and in the valuable tract which he wrote on the subject, he has laid down a very accurate discrimination of it from every other species of paralysis.

“ Improving on a hint from an ancient writer, most fortunately for mankind, Mr. Pott discovered a method of curing this dreadful malady, and has left behind him a plan for the treatment of it, which alone would suffice to transmit his name with honour to future ages. It has now stood the test of many years, has been approved, and has received the sanction of so many practitioners, that I should think it unnecessary to say more on the subject; but that it appears to me that the plan, excellent as it is, may be improved

improved and assisted. This is the reason, and this alone, which has induced me to take up the pen on a subject which has already been so ably discussed; though indeed I feel myself in some degree called upon to make these observations from having had peculiar opportunities, both in private practice and at St. Bartholomew's Hospital, of investigating Mr. Pott's method: I began with his earliest patients, have pursued his plan, am well acquainted with the extent of its powers, and think myself warranted in saying, I know what it *will do*, and what it *will not do*.

“ Since Mr. Pott made his first observations on this disease, it has much engaged the attention of the profession, and from repeated examinations it has been proved to be caused by the giving way of the bodies of some of the vertebræ, owing to a loss of substance produced by caries: in many cases the remaining parts of the bone shew that they were considerably enlarged before the carious disposition took place, which has led some to consider it as a species of *spina ventosa* of the back-bone. Such a state of the bones often produces bad symptoms and much mischief; but the curvature cannot take place till the caries has caused a loss of substance in the bodies of the vertebræ.

“ The first and great object in our endeavours to relieve this disease must be to prevent the increase or continuance of the caries, and to give nature an opportunity of restoring the weakened part by furnishing fresh growth of boney matter. That this effect has been produced by issues opened on each side of the curvature has been proved beyond controversy, by symptoms in the living, and by examination of the parts after death. Many persons, as well as myself, have, in a great variety of instances, had opportunities of observing the gradual progress of total imbecility to strength and vigour, without the intervention of any other means than issues. I have by me a very considerable collection of these cases, which passed under my own inspection,

where perfect cures have been performed by issues, and by issues only. These I had, some time since, thoughts of publishing, but the fact appeared to be so universally admitted that it was deemed unnecessary. Yet highly as I think of the power and efficacy of issues in these cases, I must confess, that in many which I have attended I have been conscious of the want of some power, or means, to raise and support the superior parts, and to take off the superincumbent pressure. And I have long been of opinion, that *in this case* surgery will find great advantage in the aid of mechanism."

Some common observations on the club-foot, accompanied by two drawings, are next related, evincing the assistance derived from mechanical powers!! Mr. Earle then comments on the objections offered by Mr. Pott against the use of instruments in remedying distortions of the spine.

"That many of the machines which have been invented to remedy distorted spines, from having been imperfectly or improperly made, badly contrived, or injudiciously applied, are capable of doing much mischief, must certainly be allowed; the neck-swing, and the screw-chair, I should conceive, can do little good, for it is obvious that a posture produced by swinging a child by the neck, or stretching it in a chair, cannot long be borne: he may be amused in it at first, but in a short time it will become irksome, if not painful, and he will be urgent to be released, and then what good can an extension of such duration have done? The weight of the superior parts all the rest of the day destroys the little effect produced. If it be often repeated, the alternative of extension and relaxation weakens the muscles and ligaments; the spine consequently is more easily bent, and increases in its curvature. In many cases, when the parts are already weakened by the disease, much mischief, even to fatality, may be the consequence of imprudently

prudently or violently stretching them. The stays, which are intended to apply forcible pressure to the prominent part of the curve, are also, in my opinion, inefficacious, and sometimes detrimental; but if a machine be contrived to elevate the head, and support the thorax, passing down the spine, and strengthening it, as a splint does a broken limb, resting on the pelvis as its basis, and with a contrivance to give such gradual and permanent extension as the weak parts will bear without injury, and to be continued until, by a deposition of osseous matter, the yielding vertebræ become firm and compact bones, I am clearly of opinion that much good from it may be derived.

“ Such is the nature of the instrument described by Le Vacher, and intended by him to remedy distortions or inclinations to grow awry in the early part of life. Various modifications of this and other contrivances, with a similar intention, are well executed by several ingenious artists in this town.

“ A machine of this kind properly made and applied has certainly great power in remedying the distortions of early life, and the advantages to be derived from it are at first sight manifest: by its assistance the spine is stretched just so much and so long as is thought right, and the patient while he wears it may walk and amuse himself in any manner he pleases. It does not prevent writing, drawing, or playing on the harpsichord; nor does it prohibit dancing, or using many kinds of exercise. The horizontal position makes it unnecessary for the instrument to be worn in bed, but if from any peculiar circumstances it might be thought right to keep it on all night, it may be done without disturbing rest.

“ It must be obvious that in all cases of early distortion the sooner the application is made the better, while it may be expected to meet with pliancy in the bones and ligaments, and may be assisted by their future growth: after

the age of sixteen or seventeen, of course less is to be expected than at earlier age; though there have been instances of persons who have had curvatures from their infancy being materially assisted in the decline of life by the support derived from such an apparatus.

“ Indeed the good effects arising from a *well-adapted* instrument in cases of curvature, from various causes unaccompanied with caries, is so generally known and acknowledged, that it is unnecessary to say more on the subject in this place: but what I principally wish by the description of it on the present occasion, is to shew that it is safe and useful, and to endeavour to set aside the disinclination which I perceive in many practitioners, as well as in the writings of Mr. Pott, to admit of its use or assistance in cases of curvature attended with caries; and further, I shall endeavour to make it apparent that, in some of these cases, such a contrivance is not only frequently useful, but often absolutely necessary. I need not observe, that undoubtedly greater care and judgment are required in the application of it where some of the bones of the spine being carious; the parts connected with them may more easily be injured by improperly or suddenly stretching them, than when the curve has arisen from muscular action or other causes.

“ But I hope not to be misunderstood; I do not mean to say, indeed am far from thinking, that instruments of any sort are wanting in every case of curvature arising from caries. The issues are often sufficient to complete the cure without any other assistance, as has been proved in numberless instances.”

With respect to the method of applying the caustic, as adopted by Mr. Pott, the author recommends the producing of longitudinal eschars on each side, near to the spinal processes, the extent of the curve, applying the caustic so as to reach just above the disease. The peas or small beans should be soaked in water, threaded and dried, and cut
into

into proper lengths, to drain; and in order to furnish a proper discharge, the *ceratum sabinæ*, recommended by Mr. Crowther, should be employed:

Ceratum Sabinæ.

R Sabinæ recentis contusæ, Ceræ flavæ, singularum libram unam; Adipis suillæ libras quator. Adipe et cerâ liquefactis incoque sabinam.

From the many difficulties Mr. Earle has experienced in following Mr. Pott's plan he was induced to use setons, to which he at length decidedly gave the preference. The method he adopts is the following:

“ A seton-needle should be procured of sufficient length, suppose about five inches long, nearly straight, made to pierce its way like a lancet: by such an instrument the track of the seton may be carried to as great a distance as can be required. It should be introduced at the superior point of the track proposed, and terminate at the lower. So much of a skein of coarse silk as is thought necessary may thus be introduced, and, when brought out at the lower wound, should be cut off from the needle, leaving about an inch to be secured, either by a knot, or by a slip of sticking-plaster, to prevent its being drawn back again. The remainder of the silk above should be neatly coiled up, and confined by a slip or two of sticking-plaster. When the suppuration is established, and the seton become loose, it may be drawn down. The part which is soiled by the matter may be cut off, and a fresh portion of silk introduced. When one skein is used, another may be connected to it, and drawn through in the same manner. Thus it may be changed as often as necessary, and the wound be kept perfectly sweet and clean. By these means the skin will not become inflamed or irritated, and the drain may be continued almost for any length of time.

“ I have often remarked, that the first action or stimulus of the caustics frequently produces an almost immediate

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effect;

effect; the patients, in a day or two after they are applied, find a considerable alteration for the better in the general state of their health, attended with a glowing warmth, and sometimes a degree of motion in the limbs. I have desired the young gentlemen in the hospital to remark this, and I have foretold that this agreeable symptom would soon be less apparent; for until the issues should arrive at a more advanced stage, no permanent good effects would be observed; and my conjecture has seldom proved unfounded. I mention this, that people may not be discouraged at experiencing this kind of check upon their hopes; let them wait with patience till the drain is fairly established, and they will rarely be disappointed in their expectations.

“Parents, nurses, and persons unaccustomed to these cases, dread the quantity of the discharge, and conceive it must tend to weaken the constitution; but it certainly has not such an effect. I have often remarked children improving in health and strength, and growing fat under a very considerable drain of this sort. I do not mean to say that this alone is the cause of the amendment; the return of health probably arises from the stop which is put to the ravages of the disease; and I only mean to infer, that neither health nor strength appears to be diminished by the discharge, which it is necessary to keep up in order to effect a cure.”

The author, with much propriety, lays great stress upon the necessity of an attentive examination of the spine, in cases which lead to a suspicion of the producing cause being derived from the back, and enforces it by the relation of the following case.

“In April 1795, Mrs. F—, a lady from Ireland, consulted Dr. Turton on account of pains with which she was afflicted about the lower part of the loins and hips, which were thought to be rheumatic. As she received no relief from medicine, and there was some inability to walk, Dr.

Turton,

Turton, with his usual acuteness of judgment, suspected that her complaints might arise from the spine: I was accordingly desired to examine it; I found the spinal processes of all the vertebræ perfectly regular and even, and could discover no reason to suppose that the disease had its source from that origin. On its increasing, I was desired to meet the Doctor again. She was now considerably worse; her pains in bed were tormenting, and almost constant; with great difficulty, and not without the assistance of a servant, she could drag one foot after the other across the room. I again examined the spine, and could discern not the smallest deviation from the right line; but, on pressing pretty firmly on every vertebra singly, I observed, when I came to the two lowermost of the loins, she shrunk from the touch, and said, in that part I gave her a sensation she had not felt before, amounting to pain, though not acute. From these observations alone it was determined to apply caustics on each side of those vertebræ, the surprising and happy consequence of which was, that in a few nights her pains grew better, and soon in a great degree left her. In a fortnight she was able to walk without assistance across the room; soon after she went into the neighbourhood of Hampton Court, where her health and strength improved rapidly, and in about two months she was able to walk a couple of miles. In the autumn I saw her at Brighthelmstone, where she bathed, walked, rode on horseback, and enjoyed good health and spirits; and I may add, that I afterwards met her frequently in London, where she spent the winter, without any return of the complaint."

A letter from Dr. Latham to Mr. Earle is next inserted; from which it appears that the Doctor has of late recommended Mr. Earle's method of applying the seton, with the happiest success.

Many of the cases, where a cure had been performed by

issues alone, the author remarks “ had long been obtruded unpleasantly on my recollection. Preserving life merely to lengthen out a miserable existence, and enabling a wretched being to crawl a little longer on the earth, appears very unsatisfactory, and stopping short, if the idea be indulged, that by any assistance from art, more may be done.” The judicious and careful application of a mechanical apparatus, similar to what we have already described, is therefore strongly urged; and as physical arguments are best supported by facts, Mr. Earle relates four cases, of which we select the two first.

“ *Case 1.*—August 25, 1788. I was desired to visit a young lady, about eleven years of age. She has been a remarkably active, upright girl, and in her school was allowed to excel in dancing. About the 18th of March immediately preceding the time mentioned, her friends and herself began to observe a want of action in the lower limbs. No cause could be assigned, but she found a disinclination to walk, and this gradually increased, until, on the 1st day of May following, the lower limbs became entirely useless. Examining the spine, I found a protrusion of several of the superior dorsal vertebræ, forming a large curvature. She was much emaciated, had lost her appetite, and complained of pain at the pit of the stomach. Unable to turn herself in bed, she was obliged to remain in any posture in which she was placed. As she sat confined in a chair, she had not power even to kick the feet forwards. If she was supported on her feet, the extremities of the toes rested on the floor, without her having power to raise them, so as to admit the sole of the foot or heel to touch the ground. The calves of the legs were become small and flabby. In short, she was as deplorable an instance of the effect produced by pressure on the spinal marrow, as I had almost ever seen. I recommended to try the power of the caustics, which were accordingly

cordingly applied on each side of the curvature. The eschars separated in about the usual time, and a large discharge was produced. In about a fortnight, as she sat in a high chair, I observed she began to kick with both her feet, at first a very little way; in a few days this power increased, and she was able to extend them considerably further. The calves of the legs became firmer, her appetite improved, her digestion was perfectly good, and (September 16) she was able to turn herself in bed without assistance. September 25, I went to see her; she was sitting in her chair as usual, kicking to shew she could use her legs. I asked her if she thought she could walk? She said, she believed she could with some assistance. I lifted her from her chair, and to my great surprise, she walked across the room, only taking hold of one of my hands, and this she repeated several times with her feet flat on the ground. After this period she continued to acquire strength gradually. November 17, she walked very well, but the *curvature* caused her to walk in a bent posture. Nov. 21, she was rather more upright, and walked round the room by herself, only taking hold of the chair or wainscot, whichever happened to be near: she was also able to walk up stairs or down. Nov. 26, she walked across the room without any assistance whatever; but, as I did not choose for her to strain herself too much, I gave her my finger, with the help of which she could walk for any length of time. Nov. 30, she walked round the room, only pressing with one hand on the wainscot, and did not complain of fatigue. December 10, she continued to improve in strength, and walked without any assistance but a stick.

“ Thus far my notes on this case lead me. I soon after took my leave, only visiting her occasionally. Her health and strength continued to improve, but the curvature remained nearly as at first, which, as before observed, was very large. The issues were continued nearly a twelve-month,

month, when they were suffered to heal. Soon after this period, this young lady again began to feel symptoms and sensations similar to what she had experienced before the caustics were applied; pain at the pit of the stomach, difficulty in moving the lower limbs, and in a short time she was growing rapidly worse. It was thought advisable to open the issues again; which being done, she soon perceived an amendment in all her complaints. But, reflecting on the case, I attributed her relapse to the largeness of the curve which was left, and which, added to general weakness, was not capable of sustaining the weight of the parts above; I therefore desired that an ingenious mechanic might be sent for, to take measure and fit her with a proper apparatus, which was accordingly done by Mr. Jones. From the time it was applied, she improved in health and strength, and in a few weeks gained several inches in height; neither the issues nor the instruments were left off, till it was judged that she had no further occasion for them; after which she continued to increase in stature, the curvature became less conspicuous, and she had no return of her former symptoms.

“ *Case 2.*—October 1791. I saw a child about five years old, who had lost the use of his lower limbs; he was just returned from the sea-side, where he had been all the summer. On account of a considerable curvature in his spine, issues had been made in his back in the preceding August. When I saw him in London, the nurse said he complained so much of pain, that she thought it impossible to keep the issues open any longer, though she was convinced the child had received some benefit from them. On looking at his back, I observed that the peas were put in singly, four or five on each side, all over the surface of the sores made by the caustic, which in one place extended over the spine, so that some of the peas lay on the projecting part of the spine. As this was probably the cause of the extraordinary

traordinary degree of pain and uneasiness, I concluded that if the peas were confined to a line, as we usually recommend, they would lie easier; four peas were accordingly threaded, and applied on each side, letting the other parts heal; but it was not possible to keep them so near the spine as was advisable, owing to the original caustics having been applied too wide: the child became easy, and, though a miserable little being, certainly gained strength. Dec. 4, he was able to walk across the room, though with his body much bent. The 23d, I found his health considerably improved, and he walked better. After this time, as he was at some distance from town, I saw him seldom, but from time to time he appeared to gain strength. March 20, 1792, I called on him, and had the pleasure to find the issues were well taken care of, and of seeing the child walk without pain or difficulty, carry a box, pull out a heavy drawer and push it in again with ease, and in every respect he appeared to have gained great strength and powers. In about a twelvemonth the issues were suffered to heal; soon after which the child again grew weak, and walked with difficulty, in a bent position. He was again sent to the sea, and the caustics were renewed, from which he soon began to find benefit; but, as the curvature was very large, it was determined to add the assistance of support by a mechanical apparatus, which was accordingly applied: the child grew rapidly better. The instrument was from that time worn for some years, during which he continued to improve without any further interruption; and I may add, that in May 1795 he called on me, healthy, upright, and grown to a moderate height."

These are sufficient to illustrate the practice of the author, and which he recommends to those who have opportunities of applying it to the test of experience. This work, however, must be considered as incomplete without a description and drawing of the spinal apparatus.

F.
ART.

ART. XII. *An Essay on the Means of lessening the Effects of Fire on the human Body.* By JAMES EARLE, Esq. F. R. S. Surgeon Extraordinary to the King and to his Majesty's Household, and senior Surgeon of St. Bartholomew's Hospital. Octavo. pp. 44. JOHNSON, London. 1799.

THIS essay bears evident marks of its having "been rather hastily drawn up." The methods of treatment, for burns and scalds, which are commonly in use, appear to the author "of very little efficacy;" he therefore proposes, in their stead, to apply water in as cold a state as possible, and very frequently renewed. Several cases are adduced to prove the superior effects of this application, and, in some of them, ice itself was employed with the greatest advantage.

"On the whole," says Mr. Earle, "I cannot too strongly recommend the use of this remedy in burns of every description, as I presume we may fairly conclude from what has been premised, that it possesses great capability of giving ease, and preventing the deplorable ravages and mischief which suffering the heat to remain in the part produces; for, from every observation I have made, the fire does not produce all its effects on the first attack, or immediate contact with the part; but afterwards lies rankling in it, and continues to spread its destructive influence until its fury is spent, or its power counteracted; as is evident from the continuance and even increase of the excessive pain and inflammation."

"Whether modern philosophers will allow that fire applied to any part of the human body does remain united to it for a time, I am not certain; but such appears to me to be the fact, and this opinion has, I find, been maintained by several very respectable authors."

"But whether the theory be doubted or not, it must be universally allowed, that the most rational and best practice

tice will be to oppose the action of fire as soon as possible, by every means in our power. And to effect this purpose, I must again observe, that I think myself well warranted in maintaining ice to be supereminently useful. The mode of its action on a burn may possibly be accounted for on the same grounds as the passage of the electric fluid, by the doctrine of plus and minus. Ice being a substance which has acquired solidity by the deprivation of heat, readily absorbs it from warmer bodies till they become of the same degree of temperature. Ice applied to a hand in a natural healthy state, gives pain, and why? because it deprives it of its due, inherent, vital heat; on the same principle, if a part suffers pain by being overcharged with heat from having been exposed to the application of fire, ice will give ease, by absorbing the superabundant heat which had taken possession of it." V.

ART. XIII. *The Anatomist's Vade Mecum: containing the Anatomy and Physiology of the human Body.* The second Edition, revised and enlarged. By ROBERT HOOPER, of Pembroke College, Oxford, M. D. F. L. S. &c. Duodecimo. pp. 219. MURRAY and HIGHLEY, London. 1800. Price 3s. 6d.

THE best account we can give of this elementary performance, will be to lay before our readers the modest introduction of the author:

"It is the intention of the writer in the following compendium to present to the student a useful anatomical conspectus, or pocket manual of anatomy and physiology; giving a short but accurate description of the different parts of the human body and their functions; with a glossary, or explanation of the principal terms used in that science.

"The utility of such a performance will be generally acknowledged,

knowledge, especially when it is considered that there is no such work written upon a similar plan.

“ The motive that induced the author to form and collect together, in one small pocket volume, this elementary production, was his having himself experienced the want of such an assistant when applying to that branch of philosophy. He therefore solicits permission to recommend it to students, not as a work wherein any thing new is to be met with, but merely as their occasional companion in the prosecution of their studies.”

A succinct and correct explanation is here given of the several objects of anatomy ; namely,

Osteology,	}	or the doctrine of the	}	Bones.	
Syndesmology,				Ligaments.	
Myology,				Muscles.	
Bursalogy,				Bursæ Mucosæ.	
Angiology,				Vessels.	
Neurology,				Nerves.	
Adenology,				Glands.	
Splanchnology,				Viscera.	
Hygrology,				Fluids.	
					W. W.

ART. XIV. *The Villager's Friend and Physician : or, a familiar Address on the Preservation of Health, and the Removal of Disease, on its first Appearance ; supposed to be delivered by a Village Apothecary. With cursory Observations on the Treatment of Children, on Sobriety, Industry, &c. Intended for the Promotion of domestic Happiness.* By JAMES PARKINSON. Duodecimo. pp. 85. SYMONDS, London. 1800. Price 1s.

THIS little tract evinces the author to be a man of feeling, sound judgment, and experience. It contains nothing which

which any well-informed medical practitioner is unacquainted with; but may be perused with considerable advantage by the class of readers for whose use it was published.

Z.

MEDICAL CORRESPONDENCE.

Art. 1. *A Case of Cholera Morbus, with Observations.*

Communicated by Mr. CHARLES PEARS, Southwark.

To the Society of Physicians and Surgeons.

GENTLEMEN,

THE favourable reception you were pleased to give to my account of a parturition case, makes me take the liberty of obtruding upon your notice the following remarkable case of cholera morbus, with observations:

The *cholera morbus* being a disease of extreme frequency, as its annual endemial attacks evince, requires our attentive observation to mitigate its violence, and evade its effects, in a more speedy and effectual manner than the usual established practice either can or will ensure. From the method generally adopted of treating it upon the anti-phlogistic plan, its continuance is ensured, and its ravages increased, to the material disadvantage of the patient in every particular; while the adoption of *opposite* means not only secures a speedy removal of the malady, but reinstates the patient more securely and happily.

As a complaint of debility it certainly requires such a tonic treatment as may tend to recover the patient by enabling the constitution to resist its attacks, and thence reinstate the former healthy action.

That this is the most *rational* and *effectual* method, will be demonstrated by the following very remarkable case, selected for that purpose, and which for excessive severity and difference of treatment may be deserving of some attention.

On

On the 21st of September 1797, Mr. M. was attacked with a violent irritation of the whole alimentary canal, which began at five o'clock in the morning. When I was desired to see the patient at nine, I found him labouring under the most excessive symptoms of CHOLERA MORBUS. Profuse perspiration. *Extreme* debility and faintness. The pulse very quick, hard, and full. A pain in the abdomen, with frequent vomitings, and excessive relaxation of the bowels, recurring at every five minutes.

I ordered him to drink beef tea, or wine and water; animal food, if disposed and able to eat; and gave

R Tinct. rhæi ʒj, Tinct. catechu ʒij, Aq. menthæ pip. ʒj, Syr. pap. albi ʒiij, M. cap. statim.

This draught was retained with some degree of exertion on the part of the patient, and at eleven o'clock the vomiting had *not* recurred. The fever and relaxation continuing as before, he then took

R Tinct. catechu, Spt. cinnam. āā ʒj, Aq. menthæ pip. ʒj, Syr. pap. albi ʒiij. M. cap. statim.

At five o'clock*. No vomiting since the morning. The fever was somewhat *less* severe. The relaxation of the bowels as before. The pain in the abdomen was abated; and some wine and water had been drank and retained. The stomach much better.

Pergat in usu haustus ut supra, cum Tinct. opii gr^{ss} xxx.

Sept. 22 †. No return of the sickness. The fever was considerably abated; but the relaxation of the bowels continued severe. The patient then took

* The number of intestinal evacuations from five in the morning to five in the afternoon, recurring at every FIVE minutes for the twelve hours inclusively, was - - - 144

† From five in the afternoon of the 21st, to five in the morning of the 22d, do. - - - 144

288

R Tinct.

R Tinct. catechu ʒij, Spt. cinnam. ʒj, Tinct. opii gr̄ xx, Aq. menthæ p. ʒj, M. Fiat haustus. Cap. j ter in die.

At five in the afternoon* the patient was much the same. He had less fever; but the relaxation was violent, and had been increased by his having risen from bed. The mouth was said to be "clammy and rough," for which he had taken some currant jelly dissolved in water. To the night draught was *added* Tinct. opii gr̄ xx.

On the 23d inst.† the patient said he had experienced a restless night, with an evacuation of the bowels about every TEN *minutes*. The fever was much abated, and no sickness. I gave

R Tinct. catechu ʒiij, Tinct. opii gr̄ xx, Spt. cinnam. ʒij, Aq. font. ʒj. M. Fiat haustus. Cap. j ter in die.

At five o'clock in the afternoon‡ the relaxation was abated in a still greater degree (an evacuation about every TWENTY minutes,) and hardly any remaining fever.

24th inst. An excellent night, not being disturbed until five in the morning, and only three evacuations since that time. The patient had sat up some time, was free from fever, and so much better, that at his own desire he took his medicine only twice a day. I saw him again in the evening at nine o'clock, and found he had just gone to bed, having eaten with some degree of appetite during the day; his stomach being well disposed to receive and retain food, though he had taken it at intervals, together with beef tea, mulled

Brought over 288

* Number of intestinal evacuations from five in the morning of the 22d, to five in the afternoon of the same day, recurring at every FIVE <i>minutes</i> for the twelve hours inclusively	144
† From five in the afternoon of the 22d, to five in the morning of the 23d inst. the twelve hours inclusively, recurring at every TEN <i>minutes</i>	72
‡ From five in the morning of the 23d, to five in the afternoon, recurring at every TWENTY <i>minutes</i>	36
	<hr/> 540

mulled wine, &c. during the attack, as recommended. He did, however, observe, that his four days illness had reduced him *three inches* in circumference, as proved by a waistcoat, which, being suitable before, was now too large by that space.

25th instant. No return of the complaint, the patient being convalescent, and only requiring strength; to facilitate the acquisition of which, I gave

R Tinct. catechu ʒj, Inf. amar. ʒjβ. M. Fiat haustus. Cap. j ter in die.

A review of this case will now shew its excessive severity, which, perhaps, has hardly its parallel; producing the *excessive* number of *more than FIVE HUNDRED AND FORTY* evacuations in *THREE DAYS* (Sept. 21, 22, and 23,) and the propriety of the treatment pursued, as evinced by its success. Had the antiphlogistic practice been pursued, with venesection, &c. what would have prevented the speedy and fatal termination of *such* a case? The extreme debility accompanying this disease naturally evinces the propriety and necessity of such remedies as may and do best *counteract* its effects. The intentions of cure, therefore, in this disease, certainly are,

1. *To remove any cause of irritation in the bowels; and,*
2. *To counteract the effects of such a debilitating attack by the administration of tonics.*

Dr. Cullen has indeed said*, that "all evacuant medicines are not only superfluous, but commonly hurtful;" and yet has reckoned the disease a biliary one, for which he *has* recommended them in vol. i. p. 461. And what can be more natural than to *evacuate* the bile, and renovate the habit under the debilitating effects it is thus inducing? Or how reconcile it to the treatment of other hepatic affections? where, indeed, the morbid affection does not so much

* See his *First Lines*, vol. iv. p. 47, edit. 1796.

arise from a plethoric state of secretion, as an inability in the vessels to perform their office, which would be easily proved *; and hence the common mistake in the rational treatment of this disease. The Doctor has indeed recommended plentiful dilution, as if it was sufficient to regard the effects, while the *cause* remained neglected, or that greater benefit could be thus obtained. The common practice upon this principle has abundantly proved, by the “long-established experience” he names, that “the cure” he wishes is not to be thus attained †.

It is, therefore, not only justifiable to assert, but perfectly consonant to our *rational* notions of this, and many other morbid affections, to say, that as a disease of debility it must be treated by opposite means; and not such as (by “the *experience*” to which Dr. Cullen refers) we find certainly do *aggravate* the complaint, and not only procrastinate the cure, but sometimes render it very doubtful, as the excessive and long-continued after-debility does sufficiently evince.

The usual error, therefore, has been to regard those symptoms as the consequence of *high action*, which are the effects produced by the constitution struggling to resist and overcome

* The propriety of this remark, as supported by observation and experience, can be exemplified by *facts*.

† Every observant practitioner must be perfectly aware of this truth in numberless instances. In the following it occurred at the same time with that above related. Mr. F. a gentleman who had a *very slight* attack of this disease, was treated rigidly antiphlogistically by his practitioner; and even chicken broth forbidden, being kept upon (Dr. Cullen's) diluents, barley-water, toast and water, &c.; so that his disease, which might have been removed in a *few hours*, was procrastinated to *six weeks*, and the cure then thought speedy. And indeed a cure is wonderful under such a method, which is more likely to ensure death than recovery, and would be inexplicable, did we not see natural efforts so frequently baffle and rise superior to all the depressing means that are employed.

overcome that debility which is certainly so inimical to itself; and therefore enforcing the necessity of our attending to this direction, and *enabling* her to produce this happy effect,—NOT by the antiphlogistic routine of bleeding, *weak* diluents, &c. &c. but by employing the various TONIC means, of wine, beef-tea, animal food, &c. with corresponding medicines, which produce such happy effects, and reinstate the patient so speedily and securely. The administration of an evacuant might, perhaps, be less important in the first instance, were there not some reasons to suppose that vegetable substances might produce and continue irritation, as this *endemic* is found to prevail more generally and severely after too great indulgence in the use of fruit, &c.

It is therefore presumed that the above treatment appears sufficiently to establish its propriety, since a case of such extreme urgency as that related, was so effectually and speedily cured thereby; and especially when supported by the constant recurrence of instances adducive of like proofs in this disease.

If, Gentlemen, you should think proper to accept of this communication, and do me the favour to excuse the many marks of haste it bears, I shall esteem it an additional honour, and beg to subscribe myself,

Your obliged servant,

Borough, Dec. 1799.

CHARLES PEARS.

Art. 2. *A short Address to the Faculty, and others whom it may concern, recommending the Use of a new Poultice; with the View of saving wholly the Consumption of Bread and Oatmeal.* By Mr. THOMAS PAYNE, Surgeon, Brook Street, Grosvenor Square.

A NOTE has been sent to us by Mr. Payne, dated the 18th of January, with a small printed tract, the contents of which

which he wishes to make generally known through the medium of our Review. We cheerfully comply with his request, in hopes of saving a considerable expense to hospitals, infirmaries, and dispensaries, as well as in the British navy, during the present scarcity of wheat-flour.

The composition here recommended is said to have been already approved and adopted by various medical practitioners in town and country. Mr. Payne informs us that he has continued to use his poultice ever since he first suggested it to the public, (nearly four years ago,) and that he likes it better now than formerly. This new composition is supposed to possess the following advantages :

“ 1st. It is equally good as the bread and milk poultice ; nay, decidedly better, if the latter be not made with the greatest precision ; while the former is prepared in a few minutes, if the ingredients and boiling water be ready.

“ 2dly. If it be made in too large a quantity for one day's consumption, it will keep till the next, or longer, not having a tendency to putrefaction, which is not the case with the bread and milk poultice ; as the latter will scarcely keep sweet for twenty-four hours. And by adding a due quantity of warm water to render the former of a proper consistence, and placing it over the fire, it may be used at a future period.

“ 3dly. The expense of this poultice is not half of that made with bread and milk, or linseed flour only ; particularly to private families, where they use dearer bread, and pay double the price for milk.

4thly. The ingredients are of such a kind as not to encourage dishonesty in the servants of public institutions ; because the articles are not so saleable as bread, oatmeal, &c. &c. and more particularly so if they are kept mixt.

“ 5thly. The proportion of the ingredients hereafter specified, will form the basis of almost every other kind of poultice, with a little attention ; for instance, the stale beer

poultice, by substituting the portion of boiling stale beer for boiling water, to the other ingredients mentioned in the recipe.

“ 6thly. By observing the same rules, may be made the anodyne poultice, with decoction of poppies; with the saturnine water, the sub-astringent poultice; with sea-water, the sea-water poultice; and so with every other poultice where a liquid forms one of its component parts; or any other specific ingredient may be used with it, such as extract of hemlock, or powders of any kind, &c.

“ 7thly. It may be made by any person of common capacity, which is an essential advantage and great recommendation; for by the recipes,” Mr. P. observes, “ I have completely simplified the making of it, which may be done by any measure your fancy or conveniency points out, though I recommend the fixing on one that will bear the nearest proportion to the quantity of poultice wanted. The measure may be a tea-cup, a galley-pot, a half-pint, pint, &c. &c. as any one measure does for measuring all the ingredients; which should always be exact, not heaped up, as water cannot be so measured.

“ *Mr. Payne's Poultice.*

“ Take three parts, by measure, of the finest pollard; one part, by measure, of fine genuine linseed flour; four parts of boiling water by measure.

“ Or, for the convenience of the navy, and hospitals, where large quantities are used, the following mode may be more easily executed, viz.

“ Take three measures (of any size you please, suppose pecks) of the finest pollard, and one peck of genuine linseed flour; which mix well together, and for distinction's sake, call Mr. Payne's Poultice Powder.

“ The most simple way of making the poultice is as follows:

“ Take one exact measure of Mr. Payne's Poultice Powder,

Powder, and one exact measure of boiling water (the measure proportioned to the quantity wanted.)

“ Mix the above ingredients well together with a spoon or spatula, &c. &c. (agreeably to either receipt,) and they will form a poultice of a proper consistency in the general; to which there will very rarely be any occasion for the adding oil, lard, or emollient ointment, excepting in very particular cases, and then only a little on the surface and edges of the poultice, as when there is great heat in the parts it is applied to: the edges of the poultice may get a little dry, but seldom to irritate; and it generally comes off very well, and leaves the parts clean. In this, as in all other poultices, regard must be had to its consistency, viz. that of not being too thin nor too thick, for these obvious reasons—if too thin, the edges of the poultice will be so, and soon become dry; if too thick, the edges become hard and dry for want of moisture. At the same time I wish it to be observed, that the recipes I have given are as near the proper consistency as a poultice can be directed to be made, and will in general do exceedingly well; I only mention the foregoing particulars by way of preventing errors in preparing it. Another observation I have to make is, that of spreading it of a proper thickness for use; which I recommend to be about three-eighths of an inch deep, to be as thick on the edges as the middle, the surface to be made equal and smooth with a large knife or long thin spatula, &c. and perhaps it would be better if the instrument were smeared over with a little oil, lard, or emollient ointment.

“ P. S. Fine pollen, or pollard, is a very fine bran, and may be had of the bakers, corn-chandlers, mealmen, and millers, at sixpence per peck. Genuine linseed flour is made by grinding the cakes from which the oil has been expressed, and may be had at the apothecaries, chymists, and druggists, if wanted in small quantities; but if in large, it may be had at the drug mills, for four pence per pound, or under.”

Art. 3. *On the Use of the phosphoric Acid in venereal Caries of the Bones.* By Dr. HARTENKEIL, Physician at Saltzbourg.

DR. Hartenkeil, of Saltzbourg, has announced, that he has employed the phosphoric acid in a case of venereal caries, which had destroyed the greater part of the superior maxillary bone. He applied it externally, according to the method recommended by Dr. Lentin, in his *Treatise De Acido Phosphori Carie Ossium Domitore*; and administered it also internally with a strong decoction of the *astragalus exscapus*. By these means the foetor and ichorous discharge were diminished; but for a time only. The external application of the acid caused a burning heat and inflammation of the ulcers. A.

Art. 4. *On the Use of Alkalies in convulsive Diseases.* By Dr. HARGENS, of Kiel.

DR. Hargens, of Kiel, informs us, that he has already tried alkalies internally in convulsive diseases; and that, agreeably to the suggestions of Humboldt and the experience of Dr. Michaelis, he has found them generally succeed. One case in which he tried the alkali, was that of a child of three years and a half old; in whom one side was very much affected with convulsions, which had resisted *calx zinci*, musk, extract of belladonna, glysters with laudanum, mustard-seed, cataplasms, &c. Twenty-five drops of *ol. tartari per deliquium* were given every five minutes! After the first dose the symptoms were greatly diminished, and their violence was almost entirely abated after the second.

In another child, who was terribly convulsed, probably from the irritation of taking two doses of fifteen drops, given at the interval of five minutes, it diminished the violence of the symptoms. In cramp of the stomach, and in tetanic

tetanic convulsions of children, the same remedy has afforded much relief. M.

Art. 5. *The Effects of Semina Phellandrii Aquatici in Consumption.* By the same.

THE same gentleman (Dr. Hargens) says, he has not derived that benefit from the seed of the water-hemlock which the authority of a Herz induced him to believe he would. At first, he says, it certainly appeared to produce an alleviation of symptoms, the cough became less frequent, and the breast appeared less confined. This change for the better was probably effected by the operation of the medicine on the stomach, and by its carminative and diuretic properties; perhaps also because the patients always appeared to place great confidence in a new remedy. In a short time, however, the patient relapsed, and all the bad symptoms returned. The most remarkable evident properties of this remedy were its carminative and diuretic powers, to which might be added a slight narcotic quality.

H.

Art. 6. *On Alum in Colica Pictonum.* By Dr. GEBEL, of Frankenstein in Silesia.

C. B. an emaciated sickly potter, who had experienced, some years ago, a violent attack of colic, was again seized with it on a late occasion, in consequence of exposure to cold. The pain was exquisite, the costiveness most obstinate. I had given the patient a neutral purgative salt and extract of chamomile in an infusion of chamomile flowers, and four grains of opium, within twenty-four hours, without effect. The same remedies were repeated the next day with as little success. On the third day he took, every half hour,

hour, a teacupful of a solution of two ounces of Epsom salt in six ounces of water; to which two ounces of oil and two grains of opium were added; but still no evacuation followed, notwithstanding glysters of vinegar and water were frequently thrown up as well as emollient ones, composed of a decoction of chamomile flowers and oil. On the fourth day of the disease I desisted from all fomentations, liniments, and glysters, and ordered one scruple of alum with half a grain of opium every four hours. The pain ceased entirely as soon as the patient had taken the fifth dose, and he had two copious stools. For two days after, he experienced a painful uneasiness about the knee. The sixteenth dose of the alum was the last remedy he took. He has since remained upwards of a year and a half quite well.

Since that time the alum has yielded equal success in the case of a woman, who suffered so acutely from colic that she rolled herself on the ground in the agony of her pain. G.

Art. 7. *On the Utility of the phosphoric Acid in Caries of the Bones and Phthisis Pulmonalis.* By Dr. LENTIN, Physician at Hanover.

THE phosphoric acid is a substance, whose sensible qualities have given rise to the belief that it would be a valuable acquisition to the materia medica. Several experiments have already been made by the French and other physicians*; and Dr. Lentin, physician at Hanover, last year presented a paper, entitled *De Acido Phosphori Carie Ossium Domitore*, to the Royal Society of Göttingen, which attracted the attention of the physicians and surgeons of that

* See the London Medical Review and Magazine, vol. i. p. 74, &c.

celebrated school, and will, no doubt, be the means of further inquiries into its utility. Dr. Lentin observes in this dissertation, which is written in latin, that the phosphoric acid is a constituent and essential part of bones; for that it exists in them so long as they maintain a solid form, and that after their dissolution, by some chymical cause, their earthy residuum does not shew any vestige of it. This circumstance induced him to try if he could not replace artificially, in caries of the bones, this principle so essential to their solidity, and of which they were deprived by disease, and thus give to them their natural hardness. With this view he covered ulcers, at whose bottom the bone was carious, with lint dipped in the phosphoric acid, more or less dissolved in distilled water. The proportion was, in general, one part of acid to eight of distilled water. The dressing was renewed twice a day, and when the ulcers were very deep, the solution was injected into them. The whole was covered with myrrh and mastic pledget, to preserve the parts from the air. In many cases Dr. Lentin observed much benefit arise from its application in this way. The ulcers lost their foetor; the ichorous sanies which they discharged changed gradually its nature, and put on the appearance of good pus; and the exfoliations of the portion of carious bone were greatly facilitated.

Encouraged by these successes, and considering that the phosphoric acid enters into the composition of the soft parts, as well as of the bones, he was induced to try its effects in other diseases. It was administered internally in a case of confirmed phthisis, accompanied with abundant expectoration of pus, in the dose of from twenty-five to thirty drops, every three hours, in a convenient proportion of distilled water; and the patient was enjoined to drink some sugared milk immediately after each dose. The effects which succeeded its use were surprising; the foetor from the lungs gradually diminished; the symptoms of fever and
expectoration

expectoration were allayed ; the patient gained strength rapidly,—but unfortunately caught the measles, and died.

Dr. Lentin then relates that he has frequently seen great benefit derived from its exhibition in phthisis ; but cautions practitioners against administering it inconsiderately in certain periods of the disease, and particularly against using it when there is an inflammatory disposition. In every case, however, where it is proper to administer it, he recommends that it be given in a sufficient dose to supply the losses the body has sustained. Several observations by other practitioners are mentioned. In a case of cancer of the uterus, communicated by the author to Dr. Hacke, physician of Stralsund, the phosphoric acid is said to have considerably diminished the foetor and abundance of the discharge. A man in a very advanced period of phthisis, who had nearly lost his voice, and laboured under colliquative sweats, and an abundant expectoration, experienced great relief in every respect from the use of this remedy. It is also recommended as an excellent tonic. B.

Art. 8. *On the Utility of the Cavadilla Seeds as a Vermifuge.*

By Professor LOEFLER, of Altona.

CAVADILLA seeds were employed by the ancients as a cathartic, but on account of their extremely acrid principle, and the violence of operation, their use was soon laid aside. They have long been employed externally to destroy vermin, and in many instances have been known to produce a considerable irritation in the skin. The celebrated Schmucker, nevertheless, has exhibited them internally as a vermifuge. He orders *half a drachm of the powder* to be mixed with honey, and taken every morning fasting for five mornings, and then administers a drastic purge. Employed in this manner it is said to bring away the *ver-solitaire* or *solium*, a species

species of tape-worm very difficult to destroy; and although he has given it in a great number of cases, he has never once been disappointed in its effect.

Professor Loefer, of Altona, has likewise employed it with equal success. A soldier who had had a putrid fever, accompanied with epileptic convulsions, was suddenly seized with delirium. The abdomen was considerably swollen, which, with other symptoms, gave rise to the supposition that there were worms. The cavadilla was given to him in the manner recommended by Schmucker: it made him vomit a considerable quantity of ascarides and mucus, which immediately relieved him; his delirium left him, and his health was soon re-established.

A woman labouring under a continued fever, violent head-achs, and tense and swelled abdomen, for which the ordinary evacuants had been given without producing any relief, took the cavadilla: it brought away a great quantity of worms; and, in the course of five days, she was perfectly well.

A soldier during six years was occasionally attacked with epilepsy, the cause of which could not be discovered. Professor Loefer learnt that he was occasionally troubled with worms: the cavadilla was administered, and brought away in his stools an immense quantity of worms and mucus; and he has since remained free from any attack of epilepsy. It was also given with similar success to a soldier who had been attacked during twenty years with epilepsy, and who was previously to each attack troubled with pains in the abdomen.

A woman, much reduced by a profuse salivation, was for some time after troubled with pains in the abdomen, and an unusual thirst: after exhibiting the cavadilla for four days, a purge was administered, and a tape-worm, eleven ells in length, was expelled. All the inconveniences she before suffered gradually disappeared.

Dr. Herlz, in the twelfth volume of his Letters to Physicians, mentions that he always experienced very good effects from this medicine against the various symptoms occasioned by the *ver-solitaire* and other worms; and he says that he considers it as a specific in these diseases. D.

Art. 9. *Observations on a frequent, and, until the present Time, unknown Cause of apparent Death of new-born Children.* By Mr. HERHOLDT, Surgeon at Copenhagen.

MR. Herholdt has discovered by anatomical researches, made upon animals before their birth, that the Eustachian tubes are filled with mucus and liquor amnii, in order to establish an equilibrium between the external fluids and those within; without which, the membrana tympani would be violently compressed by the fluid surrounding the fœtus.

This discovery naturally led him to another, which is, that the liquor amnii gets into the fauces and fills the trachea. The experiments which were made at the veterinary school in the presence of the Professor Abildgaard and his assistant Mr. Rafn, confirm these facts. The water contained in the trachea is generally evacuated during labour, in consequence of the pressure there is upon the chest. Its evacuation, however, is not always effected by these means; and the passage of the air into the lungs is then impeded. In this case, it is not only necessary to remove the gross phlegm about the fauces, but, as there is a fluid in the trachea, the child should be put in a situation that will enable the water to pass out by its own gravity.

Since Herholdt has attended to this circumstance, he has treated the apparent death of children with the most happy success. By attending to this rule, he has brought to

to

to life twelve children out of thirteen, whose apparent death was in consequence of this accumulation! Stimulating the bronchia, and blowing air into the lungs, the ordinary means which are had recourse to in similar cases, are highly dangerous if they be employed before this fluid is evacuated; for they propel it into the air-cells, and thus render death inevitable. Professors Abildgaard and Viborg opened, in the year 1797, five puppies before their birth, and found, in each, not only the trachea, but the bronchia, filled with the liquor amnii. This discovery is of the greatest importance in the practice of midwifery, and has already been attended with the most happy consequences.

E.

Art. 10. *Monthly Catalogue of new Publications.*

BRITISH PUBLICATIONS.

1. **A** LETTER to Mr. Ogden, on the Cæsarean Operation. By G. TOMLINSON. 8vo. pp. 20. Manchester, I. and W. Clarke. Price 1s.
2. An Essay on Regimen. By JAMES M. ADAIR. 8vo. Air. 1799.
3. Annals of Medicine. By A. DUNCAN, sen. and jun. M.D. Vol. IV. 8vo. Edinburgh. 1800. Price 8s.
4. On the Non-existence of Typhus Contagion; with Remarks on animal Life, and Diseases epidemic at Sea. By J. FRANKS. 8vo. London. 1799.
5. A Case of Diabetes; with a historical Account of that Disease. By T. GIRDLESTONE, M.D. 8vo. London. 1799.
6. An Essay on the Analysis of mineral Waters. By R. KIRWAN. 8vo. London. 1799.
7. Geological Essays. By R. KIRWAN. 8vo. London. 1799.
8. An Essay on a putrid malignant Fever, which pre-
vailed

ailed at Warwick in 1798. By G. LIPSCOMB. 8vo. London. 1799.

9. Fourcroy's Elements of Chemistry and Natural History; with Notes. By JOHN THOMSON. Vol. II. 8vo. Edinburgh. 1799.

10. Tracts and Observations on Natural History and Physiology. By ROBERT TOWNSON. 8vo. London. 1799.

11. Transactions of the Royal Society of Edinburgh. Vol. V. Part I. 4to. Edinburgh. 1799.

12. An Essay on medical Electricity; with Observations on the Inefficacy of metallic Tractors. By C. H. WILKINSON. 8vo. London. 1799.

13. On the Ventilation of Hospitals and Barracks. By P. H. WILLIAMS. 8vo. London. 1799.

14. Transactions of the Linnean Society. Vol. V. 4to. London, White. Price 1*l.* 1*s.*

15. Practical Observations on the Diseases of the Army in Jamaica, during the Years 1792-1797. By WILLIAM LEMPRIERE. 8vo. Two Volumes. London. 1799.

16. A cursory View of the Treatment of Ulcers; more especially those of the scrophulous, phagedenic, and cancerous Disposition; with an Appendix, on Mr. Baynton's new Mode of treating old Ulcers of the Legs. By RICHARD NAYLER, Surgeon to the Gloucester Infirmary. London, Kearsley. Price 3*s.* 6*d.*

17. Dr. JAMES CURRIE has published a second edition of his medical Reports on the Effects of Water in Fever. London, Cadell. 8vo. Price 6*s.*

18. Three Lectures upon Animal Life, delivered in the University of Pennsylvania. By BENJAMIN RUSH, M.D. Professor of the Institutes of Medicine, and of clinical Practice, in the said University. Published at the Request of his Pupils. 8vo. pp. 84. X. X.

* * * *The List of FOREIGN PUBLICATIONS will be given in our next Number, with several ORIGINAL PAPERS received by the Society.* INDEX

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